

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: 10633 Contact Name: Renee Kendrick
 Name of Operator: CRESTONE PEAK RESOURCES OPERATING LLC Phone: (303) 309-1931
 Address: 1801 CALIFORNIA STREET #2500 Fax: _____
 City: DENVER State: CO Zip: 80202 Email: renee.kendrick@crestonepr.com

For "Intent" 24 hour notice required, Name: Beardslee, Tom Tel: (970) 420-3935
 COGCC contact: Email: tom.beardslee@state.co.us

API Number 05-123-21857-00 Well Name: COSSLETT Well Number: 31-22
 Location: QtrQtr: NWNE Section: 22 Township: 1N Range: 68W 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: 40.041606 Longitude: -104.987896
 GPS Data: Date of Measurement: 06/04/2012 PDOP Reading: 2.5 GPS Instrument Operator's Name: plinderh
 Reason for Abandonment: Dry Production Sub-economic Mechanical Problems
 Other _____
 Casing to be pulled: Yes No Estimated Depth: 2000
 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	7920	7940			
J SAND	8370	8400			
NIOBRARA	7634	7710			

Total: 3 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	1,205	474	1,205	0	VISU
1ST	7+7/8	4+1/2	11.6	8,410	255	8,410	6,980	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8300 with 2 sacks cmt on top. CIBP #2: Depth 7560 with 2 sacks cmt on top.
CIBP #3: Depth 100 with 0 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 5 sks cmt from 4635 ft. to 4570 ft. Plug Type: CASING Plug Tagged:
Set 75 sks cmt from 2000 ft. to 1804 ft. Plug Type: OPEN HOLE Plug Tagged:
Set 30 sks cmt from 100 ft. to 0 ft. Plug Type: CASING Plug Tagged:
Set 30 sks cmt from 1054 ft. to 954 ft. Plug Type: CASING Plug Tagged:
Set 30 sks cmt from 384 ft. to 284 ft. Plug Type: CASING Plug Tagged:

Perforate and squeeze at 4650 ft. with 85 sacks. Leave at least 100 ft. in casing 4635 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 65 sacks half in. half out surface casing from 1265 ft. to 1096 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:

Procedure

1. Submit electronic Form 42 to COGCC 48 hours prior to performing Form 17 Bradenhead Test. (not required if Bradenhead Test has been completed within 60 days of plugging operations.)
2. Perform Form 17 Bradenhead Test and sample for gas, water, and oil per COGCC Regulation.
3. Contact surveyor to acquire as-built surface location.
4. Submit electronic Form 42 to COGCC 48 hours prior to MIRU.
5. Submit form for Ground Disturbance Permit. Get One Call.
6. Notify Automation and Production Department. Production to check pressures, retrieve plunger equipment and blow down well.
7. Hold a pre-job safety meeting. Discuss all aspects of the procedure with any involved personnel. Identify and address any safety concerns before the job begins.
8. MIRU workover unit. Blow down well.
9. ND wellhead. NU BOPE.
10. Un-land tubing and TOO H w/tubing.
11. MIRU wireline.
12. RIH w/ CIBP on wireline. Set CIBP at ~8,300' (within 50'-100' of the top of the J-Sand at 8,351', between collars).
13. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH.
14. RIH w/ CIBP on wireline. Set CIBP at ~7,560' (within 50'-100' of the Niobrara formation top at 7,632', between collars).
15. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH.
16. Pressure test plug to 500 psi. Hold pressure for 15 min.
17. TIH with bit and scraper. Run bit and scraper to at least 4700'. TOO H.
18. RIH w/ perforating gun. Perforate squeeze holes at 4650'. POOH.
19. PU CICR with tubing and TIH to 4,635'. Set CICR. Unsting and pressure test tubing. Sting into CICR and establish circulation/injection.
20. Pump 85 sx Class G cement. (Note: Squeeze volume calculations are based on 1.15 CF/sk cement yield). Leave 1 bbl on top of CICR. Roll hole clean. Ensure there are no signs of pressure, hydrocarbons or fluid migration. Contact office if there is any evidence. TOO H.
21. ND 7 1/16" BOP and wellhead. NU 11" BOP on surface casing. RU casing tongs and pipe wrangler.
22. RIH with casing jet cutter on wireline. Cut 4 1/2" casing at 2,000. POOH with wireline. Pull casing with spear to first joint, remove casing slips. Establish circulation.
23. Pump and spot 75 sx Class G balance stub plug from 2,000' to 1,804'. Trip out of hole to 1265'. Wait on cement for 4 hours. Roll hole. Ensure there is no sign of hydrocarbons. If evidence is found, contact engineering. If circulation was not maintained while pumping plug, then the plug must be tagged after WOC.
24. Pump 65 sx Class G or Type III cement (mixed with sufficient accelerant to achieve a 4-hour set time, 1.15 cf/sk yield) to spot a balanced plug across surface casing shoe. TOC will be approximately 1096'. TOO H laying down all casing. Wait on cement for 4 hours.
25. TIH w/ tubing and tag cement top (top must be at least 50' above casing shoe—1155' or shallower). Report top to engineering. Pressure test plug to 250 psi. TOO H.
26. PU 8-5/8" CIBP. TIH and set @ 100'. Blow hole dry with rig compressor. TOO H. LD all tubing.
27. ND BOP. Install casing cap w/ relief valve.
28. Disconnect flowline from separator and connect to junk tank placed at the battery.
29. Flush flowline with treated fresh water then blow dry with rig compressor. Prepare flowline for removal by construction department.
30. RDMO pulling unit.
31. MIRU top off truck, water truck and air compressor.
32. RIH w/ plastic tubing to CIBP at 100'.
33. Reverse circulate with 30 sx cement from 100' to surface. Top off well and annular spaces as needed.
34. RDMO top off equipment.
35. Per ground disturbance procedure/policy, excavate around wellhead. Notify Environmental Department for surface review and inspection while digging.
36. Contact EHS to scan WH with FLIR to confirm well is plugged with no gas at surface. Save FLIR photo in well file.
37. Cut off casing 4 ft below ground level.
38. Weld on metal plate and dry hole marker.
39. Remove flowlines and backfill holes.
40. Notify Integrity Department to properly

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Renee Kendrick
 Title: Regulatory Coordinator Date: 8/15/2018 Email: renee.kendrick@crestonepr.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: Wolfe, Stephen Date: 8/21/2018

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 2/20/2019

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. <ul 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, or 2) Pressure remains at the conclusion of the test, or 3) 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.
	<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 of the approved NOI unless prior approval from COGCC is obtained. • COGCC Change: Add 30 sx cement plug from 1054-954' for aquifer isolation (L-FH). • COGCC Change: Add 30 sx cement plug from 384-284' for aquifer isolation (L. Arapahoe), • If there is any pressure on the surface casing during the pre-plugging bradenhead test operator must wait 8 hrs after pumping plug at 2000' and check for fluid migration or shut-in pressure on the well. Contact COGCC Engineer for revised plugging orders if well is not static at this time prior to continuing with plugging operations. • Tag plug at 2000' if circulation is not maintained while pumping and displacing plug to depth, minimum plug height required 100'. • 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 Engineer for revised plugging orders if well is not static at this time, prior to continuing with plugging operations. • 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, 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. • 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.

Attachment Check List

Att Doc Num	Name
401734779	FORM 6 INTENT SUBMITTED
401734797	WELLBORE DIAGRAM
401734798	PROPOSED PLUGGING PROCEDURE

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	SB5 1004-656 L-FH 334-284 L. Arapahoe WW 850' 43	08/21/2018
Permit	Passed permit review	08/20/2018
Well File Verification	Pass	08/20/2018

Total: 3 comment(s)