

Document Number:  
401618978

Date Received:  
04/24/2018

**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: 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: Gomez, Jason Tel: (970) 573-1277

**COGCC contact:** Email: jason.gomez@state.co.us

API Number 05-123-21798-00 Well Name: LOCHBUIE Well Number: 21-31

Location: QtrQtr: NENW Section: 31 Township: 1N Range: 65W 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: 40.013760 Longitude: -104.709235

GPS Data:  
Date of Measurement: 06/04/2009 PDOP Reading: 1.5 GPS Instrument Operator's Name: PLinderholm

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

Casing to be pulled:  Yes  No Estimated Depth: 2300

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
J SAND	7926	7954			
DAKOTA	8108	8116	01/18/2004	B PLUG CEMENT TOP	8100

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	1,300	467	1,300	0	VISU
1ST	7+7/8	4+1/2	11.6	8,205	305	8,205	6,616	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7875 with 2 sacks cmt on top. CIBP #2: Depth 7025 with 2 sacks cmt on top.  
CIBP #3: Depth 1125 with 5 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 100 sks cmt from 2300 ft. to 1960 ft. Plug Type: OPEN HOLE Plug Tagged:   
Set 15 sks cmt from 50 ft. to 0 ft. Plug Type: CASING Plug Tagged:   
Set 30 sks cmt from 625 ft. to 525 ft. Plug Type: CASING Plug Tagged:   
Set 30 sks cmt from 275 ft. to 175 ft. Plug Type: CASING 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 60 sacks half in. half out surface casing from 1350 ft. to 1175 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. Kill well.
9. ND wellhead. NU BOPE.
10. Un-land tubing and TIH w/tubing. Tag CIBP @ ~8,100'. TOOH.
11. MIRU wireline.
12. RIH w/ CIBP on wireline. Set CIBP at ~7,875' (within 50'-100' of the top J-Sand perf at 7,926', between collars).
13. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. Pressure test plug to 500 psi. Hold pressure for 15 min. Chart pressure on 1,000 psi pressure chart.
14. RIH w/ CIBP on wireline. Set CIBP at ~7,025' (within 50'-100' of the Niobrara formation top at 7,082', between collars).
15. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH.
16. ND 7 1/16" BOP and wellhead. NU 11" BOP on surface casing. RU casing tongs and pipe wrangler.
17. RIH with casing jet cutter on wireline. Cut 4 1/2" casing at 2,300'. POOH with wireline. Pull casing with spear to first joint, remove casing slips. Establish circulation.
18. Pump and spot 75 sx Class G balance stub plug from 2,300' to 2,042'. Trip out of hole to 1,350'. Roll hole. Ensure there is no sign of hydrocarbons. If evidence is found, contact engineering. If circulation is not maintained then tag the plug after WOC.
19. Pump 50 sx Class G or Type III balanced plug across surface casing shoe. Pump wiper plug ahead of cement to ensure water does not mix with cement. TOC will be approximately 1,175'. TOOH laying down all casing. Wait on cement for 4 hours.
20. TIH w/ tubing and tag cement top. Report top to engineering. Tag must be 1,250' or shallower. TOOH.
21. PU 8-5/8" CIBP. TIH and set @ 1,125'. Pressure test casing to 250 psi. TOOH and LD setting tool.
22. TIH and pump 1 bbl (~5sx) cement on top of CIBP. TOOH to 50'
23. Pump 15 sx Type III balanced plug from 50' to surface.
24. ND BOP. Top off well as necessary with cement.
25. Disconnect flowline from separator and connect to junk tank placed at the battery.
26. Flush flowline with treated fresh water then blow dry with rig compressor. Prepare flowline for removal by construction department.
27. RDMO pulling unit.
28. Per ground disturbance procedure/policy, excavate around wellhead. Notify Environmental Department for surface review and inspection while digging.
29. Contact EHS to scan WH with FLIR to confirm well is plugged with no gas at surface. Save FLIR photo in well file.
30. Cut off casing 4 ft below ground level.
31. Weld on metal plate and dry hole marker.
32. Remove flowlines and backfill holes.
33. Notify Integrity Department to properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment is complete.
34. Restore surface location.
35. Ensure all pressure charts, cement and wireline tickets are emailed to the Denver office for subsequent reporting. Emails shall be sent to Production Engineer, Workover Coordinator, and Production Technician.
36. Submit Form 6 Subsequent Report of Abandonment documenting the P&A to COGCC.

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: 4/24/2018 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: 5/16/2018

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_ Expiration Date: 11/15/2018

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"> <li>• 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.</li> <li>• 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"> <li>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</li> <li>2) Pressure remains at the conclusion of the test, or</li> <li>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.</li> </ol> </li> <li>• Form 17 Bradenhead Test Report shall be submitted within 10 days of the test.</li> <li>• 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.</li> </ul>
	<p>Plugging</p> <ul style="list-style-type: none"> <li>• Provide 48 hour notice of plugging MIRU via electronic Form 42.</li> <li>• COGCC Change: Increase volume of open hole stub plug at 2300' to 100 sx.</li> <li>• COGCC Change: Increase volume of shoe plug at 1350' to 60 sx.</li> <li>• COGCC Change: Add 30 sx casing plug at 625-525', aquifer isolation.</li> <li>• COGCC Change: Add 30 sx casing plug at 275-175', aquifer isolation.</li> <li>• If pressure or liquids are present on the surface casing at any time during the pre-plugging bradenhead test, wait 8 hrs after pumping stub plug at 2300', tag 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.</li> <li>• 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.</li> <li>• Tag required if the shoe plug, or combined stub/shoe plug, is not circulated to the surface and top of cement must be 50' into the shoe, or 50' above the stub, whichever is shallower.</li> <li>• 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.</li> <li>• Properly abandon flowlines as per Rule 1103. File electronic Form 42 once flowline abandonment is complete.</li> </ul>

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401618978	FORM 6 INTENT SUBMITTED
401619144	PROPOSED PLUGGING PROCEDURE
401619146	WELLBORE DIAGRAM

Total Attach: 3 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	SB5 1171-879 L-FH 571-299 L. Arapahoe 224-70 U. Arapahoe WW 1100 145	05/16/2018
Permit	•Permitting Review Complete.	05/10/2018
Well File Verification	Pass	04/25/2018

Total: 3 comment(s)