

Document Number:  
401798240

Date Received:  
10/16/2018

**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: Toby Sachen

Name of Operator: CRESTONE PEAK RESOURCES OPERATING LLC Phone: (720) 410-8536

Address: 1801 CALIFORNIA STREET #2500 Fax: \_\_\_\_\_

City: DENVER State: CO Zip: 80202 Email: toby.sachen.contractor@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 05-123-29899-00

Well Name: HALEY Well Number: 8-2-22

Location: QtrQtr: SENE Section: 22 Township: 2N 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: 40.127077 Longitude: -104.984244

GPS Data:  
Date of Measurement: 02/17/2010 PDOP Reading: 2.0 GPS Instrument Operator's Name: ROB THOMAS

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	7692	7712			
J SAND	8134	8150			
NIOBRARA	7472	7492			
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	773	395	773	0	VISU
1ST	7+7/8	4+1/2	11.6	8,321	210	8,321	6,530	CBL
S.C. 1.1				5,440	160	5,440	3,560	CBL

### Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8070 with 2 sacks cmt on top. CIBP #2: Depth 7360 with 2 sacks cmt on top.  
 CIBP #3: Depth 80 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 20 sks cmt from 5490 ft. to 5225 ft. Plug Type: CASING Plug Tagged:   
 Set 30 sks cmt from 4645 ft. to 4250 ft. Plug Type: CASING Plug Tagged:   
 Set 75 sks cmt from 2000 ft. to 1804 ft. Plug Type: OPEN HOLE Plug Tagged:   
 Set 20 sks cmt from 80 ft. to 0 ft. Plug Type: CASING Plug Tagged:   
 Set 30 sks cmt from 320 ft. to 220 ft. Plug Type: CASING 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 75 sacks half in. half out surface casing from 825 ft. to 624 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 1105  Yes  No \*ATTACH JOB SUMMARY

Technical Detail/Comments:

1. Perform Form 17 Bradenhead Test and sample for gas, water, and oil per COGCC Regulation. (not required if Bradenhead Test has been completed within 60 days of plugging operations.)
2. Contact surveyor to acquire as-built surface location.
3. Submit electronic Form 42 to COGCC 48 hours prior to MIRU.
4. Submit form for Ground Disturbance Permit. Get One Call.
5. Notify Automation and Production Department. Production to check pressures, retrieve plunger equipment and blow down well.
6. 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.
7. MIRU workover unit. Blow down well.
8. ND wellhead. NU BOPE.
9. Un-land tubing and TOO H w/tubing.
10. MIRU wireline.
11. RIH w/ CIBP on wireline. Set CIBP at ~8,070' (within 50'-100' of the top of the J-Sand at 8,120', between collars).
12. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH.
13. RIH w/ CIBP on wireline. Set CIBP at ~7,360 (within 50'-100' of the top of the Niobrara at 7,426', between collars).
14. RIH w/ wireline and dump bail 2 sx cement on top of CIBP. POOH. Pressure test plug to 500 psi. If pressure test fails, contact engineering for next steps.
15. TIH w/ tubing to 5,490.
16. Pump 20 sx Class G balanced plug from 5,490 to 5,225' to cover stage tool. TOO H w/ tubing to 4645'.
17. Pump 30 sx Class G balanced plug from 4,645 to 4,250' (Sussex plug). TOO H w/ tubing.
18. ND 7 1/16" BOP and wellhead. NU 11" BOP on surface casing. RU casing tongs and pipe wrangler.
19. 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.
20. Pump and spot 75 sx Class G balance stub plug from 2,000' to 1,804'. Trip out of hole to 825'. Roll hole. Ensure there is no sign of hydrocarbons. If evidence is found, contact engineering. If circulation was not maintained, then the plug must be tagged after WOC.
21. Pump 75 sx Class G or Type III cement (mixed with sufficient accelerant to achieve a 4-hour set time) to spot a balanced plug across surface casing shoe. TOC will be approximately 624'. TOO H laying down all casing. Wait on cement long enough to ensure cement is set sufficiently to obtain a good tag and pressure test.
22. TIH w/ tubing and tag cement top. Per COGCC guidelines, cement top must be at 723' or higher. Report top to engineering. Pressure test plug to 250 psi. TOO H.
23. PU 8-5/8" CIBP. TIH and set @ 80'. Blow hole dry with rig compressor. TOO H. LD all tubing.
24. ND BOP. Install casing cap w/ relief valve.
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. Clean up location. Label all equipment to be sent to the yard with the well name.
28. MIRU top off truck, water truck, air compressor
29. RIH with plastic tubing at CIBP at 80'.
30. Reverse circulate with 20 sx of cement from 80' to surface. Top off well and annular spaces as needed.
31. RDMO top off equipment.
32. Per ground disturbance procedure/policy, excavate around wellhead. Notify Environmental Department for surface review and inspection while digging.
33. Contact EHS to scan WH with FLIR to confirm well is plugged with no gas at surface. Save FLIR photo in well file.
34. Cut off casing 4 ft below ground level.
35. Weld on metal plate and dry hole marker.
36. Remove flowlines and backfill holes.
37. Notify Integrity Department to properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment is complete.
38. Restore surface location.
39. Ensure all rig tickets, pressure charts, cement and wireline tickets are saved to the electronic well files on the shared drive for subsequent reporting.
40. Submit Form 6 Subsequent Report of Abandonment

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

Signed: \_\_\_\_\_ Print Name: Toby Sachen  
 Title: Contractor Date: 10/16/2018 Email: toby.sachen.contractor@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: 10/23/2018

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_ Expiration Date: 4/22/2019

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"> <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>• Plugs and squeezes will be placed as stated in the plugging procedure of the approved NOI unless revised by COA or prior approval from COGCC is obtained.</li> <li>• If there is any pressure/fluid 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.</li> <li>• Tag plug at 2000-1804' if circulation is not maintained while pumping and displacing plug to depth, 100' minimum required.</li> <li>• COGCC Change: Add 30 sx cement plug at 320-220', or CIBP with 4 sx at 320', aquifer isolation.</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. Document well conditions in operations summary attached to the Form 6 SRA.</li> <li>• 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.</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 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.</li> </ul>

**Attachment Check List**

Att Doc Num	Name
401798240	FORM 6 INTENT SUBMITTED
401798242	PROPOSED PLUGGING PROCEDURE
401798244	WELLBORE DIAGRAM

Total Attach: 3 Files

**General Comments**

<b><u>User Group</u></b>	<b><u>Comment</u></b>	<b><u>Comment Date</u></b>
Engineer	SB5 277-55' L-FH WW 424' 38(1) Log BP L-FH, Base UPA 1380'	10/23/2018
Well File Verification	Pass	10/19/2018
Permit	Pass	10/18/2018

Total: 3 comment(s)