

Document Number:  
401047481

Date Received:  
11/06/2016

**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: 53790 Contact Name: Mark Brown

Name of Operator: MARKUS PRODUCTION, INC Phone: (720) 350-8858

Address: 39 FAIRWAY LANE Fax: \_\_\_\_\_

City: LITTLETON State: CO Zip: 80123 Email: mark@markusproduction.com

**For "Intent" 24 hour notice required,** Name: Schure, Kym Tel: (970) 520-3832

**COGCC contact:** Email: kym.schure@state.co.us

API Number 05-087-08106-00

Well Name: NB WICKSTROM-STATE Well Number: 42-16

Location: QtrQtr: SENE Section: 16 Township: 6N Range: 60W Meridian: 6

County: MORGAN Federal, Indian or State Lease Number: 47/5034-S

Field Name: CRICKET Field Number: 13570

Notice of Intent to Abandon       Subsequent Report of Abandonment

*Only Complete the Following Background Information for Intent to Abandon*

Latitude: 40.490327 Longitude: -104.092392

GPS Data:  
Date of Measurement: 05/18/2010 PDOP Reading: 2.8 GPS Instrument Operator's Name: Waylon Binger

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

Casing to be pulled:  Yes  No Estimated Depth: 5500

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
D SAND	6588	6592			

Total: 1 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	215	303		VISU
1ST	7+7/8	5+1/2	15.5	6,774	160	6,774	5,990	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6525 with 10 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 100 sks cmt from 5550 ft. to 5400 ft. Plug Type: STUB PLUG Plug Tagged:   
Set 40 sks cmt from 1500 ft. to 1400 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 5900 ft. with 40 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 50 sacks half in. half out surface casing from 355 ft. to 255 ft. Plug Tagged:

Set 15 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:

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

Signed: \_\_\_\_\_ Print Name: Mark Brown

Title: President Date: 11/6/2016 Email: mark@markusproduction.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: SUTPHIN, DIRK Date: 12/8/2016

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_

Expiration Date: 6/7/2017

<b>COA Type</b>	<b>Description</b>
	<p>Prior to starting plugging operations, perform a Bradenhead Test. Submit Form 17 within 10 days. If well has a beginning Bradenhead pressure greater than 25 PSI, if any pressure remains at the conclusion of the test, or flowed any liquids from the Bradenhead see Sampling Requirements below.</p> <p>Submit analytical results to the COGCC environmental database in an accepted Electronic Data Deliverable (EDD) format. Sampling requirements:</p> <p>Gas: Collect a sample of both the production and bradenhead gas and submit for laboratory analysis of the gas composition and stable isotope analysis including the d13C1, d13C2, d13C3, d13C4, d13NC4 d13IC5 , d13NC5, d13C6+ (if possible), and dDC1.</p> <p>Water: Collect samples from bradenhead and submit for the laboratory analysis of major anions (chloride, carbonate, bicarbonate, and sulfate), cations (sodium, potassium, calcium, and magnesium) total dissolved solids (TDS), BTEX, DRO, GRO and dissolved gases (RSK 175). If there is a limited amount of water available then anions, cations and BTEX should be given first priority.</p> <p>Liquid hydrocarbons: Collect samples from bradenhead and submit for the laboratory analysis: Whole-Oil GC (C4 - C45).</p>
	<p>Note changes to submitted form. 1) Provide 48 hour notice of MIRU via electronic Form 42. 2) Shoe plug: Tag plug 50' above surface casing shoe. 3) Surface plug: Cement from 50' to surface in casing and both annuluses. 4) Properly abandon flowlines per Rule 1103. File Form 42 when done. 5) Abandoned well marker shall be inscribed with the well's legal location, well name and number, and API Number (Rule 319.a.(5)).</p>

### **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
401047481	FORM 6 INTENT SUBMITTED
401047482	WELLBORE DIAGRAM
401047483	WELLBORE DIAGRAM

Total Attach: 3 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
Engineer	COGCC changes: <ul style="list-style-type: none"> <li>• Added plug at 5900' (isolate above Niobrara).</li> <li>• Added plug at 1500' (isolate below Upper Pierre aquifer - WWs within 2 miles).</li> <li>• Increased shoe plug depth to 355' (start 50' below surface casing shoe).</li> <li>• Increased surface plug cement quantity to 15 sks (50' plug is 15 sx)</li> </ul>	12/08/2016
Public Room	Document verification complete 11/08/16	11/08/2016
Permit	Verified formation and perf depths on Form 5A (Doc# 949910, 4/6/2000) in well file. Permit review complete.	11/07/2016

Total: 3 comment(s)