

Document Number:  
400521730

Date Received:  
12/04/2013

**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: 10387 Contact Name: Sarah Hawkins

Name of Operator: US GEOLOGICAL SURVEY Phone: (303) 2365767

Address: MS 939 BOX 25046 Fax: \_\_\_\_\_

City: DENVER State: CO Zip: 80225 Email: shawkins@usgs.gov

**For "Intent" 24 hour notice required,** Name: \_\_\_\_\_ Tel: \_\_\_\_\_

**COGCC contact:** Email: \_\_\_\_\_

API Number 05-037-06006-00

Well Name: USGS Well Number: HM-1-13

Location: QtrQtr: NWNW Section: 3 Township: 4S Range: 83W Meridian: 6

County: EAGLE Federal, Indian or State Lease Number: \_\_\_\_\_

Field Name: \_\_\_\_\_ Field Number: 99999

Notice of Intent to Abandon       Subsequent Report of Abandonment

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

Latitude: 39.739306 Longitude: -106.684361

GPS Data:  
Date of Measurement: 04/03/2013 PDOP Reading: 0.0 GPS Instrument Operator's Name: S. HAWKINS

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

Other drilled to obtain research core only

Casing to be pulled:  Yes     No    Estimated Depth: \_\_\_\_\_

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

Total: 0 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	10	6+5/8	17	54	25	54	0	VISU
OPEN HOLE	5			807				

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth \_\_\_\_\_ with \_\_\_\_\_ 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 18 sks cmt from 180 ft. to 54 ft. Plug Type: OPEN HOLE Plug Tagged:   
 Set 10 sks cmt from 54 ft. to 0 ft. Plug Type: CASING 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 \_\_\_\_\_ sacks half in. half out surface casing from \_\_\_\_\_ ft. to \_\_\_\_\_ 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: 07/21/2013  
 \*Wireline Contractor: USGS Research Drilling Crew \*Cementing Contractor: USGS Research Drilling Crew  
 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: Sarah Hawkins  
 Title: GEOLOGIST Date: 12/4/2013 Email: shawkins@usgs.gov

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: KRABACHER, JAY Date: 4/2/2014

**CONDITIONS OF APPROVAL, IF ANY:**

COA Type	Description

### Attachment Check List

Att Doc Num	Name
400521730	FORM 6 SUBSEQUENT SUBMITTED

Total Attach: 1 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	P&A procedure included filling bottom of hole (up to cemented interval) with a bentonite slurry.	4/2/2014 2:41:32 PM
Engineer	added open-hole segment to casing tab. Form 5 reports TD of 807'. core obtained from 6' (tp*) to 804' -- recovered 782'. core analyses will be released by USGS (web-site) in autumn of 2014. *tp = ?	4/2/2014 2:35:37 PM
Permit	Passes Permitting. Plugging was done by USGS employees in Drilling group and no further report will be issued, as per Sarah Hawkins, USGS.	3/24/2014 10:36:31 AM

Total: 3 comment(s)