



DE ET OE ES

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400413631

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05/07/2013

**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: 100322 Contact Name: Leah Perkins  
 Name of Operator: NOBLE ENERGY INC Phone: (970) 304-5222  
 Address: 1625 BROADWAY STE 2200 Fax: (970) 304-5099  
 City: DENVER State: CO Zip: 80202 Email: lperkins@nobleenergyinc.com  
**For "Intent" 24 hour notice required,** Name: HICKEY, MIKE Tel: (970) 302-1024  
**COGCC contact:** Email: mike.hickey@state.co.us

API Number 05-001-06671-00 Well Number: 2  
 Well Name: HECKENDORF  
 Location: QtrQtr: SWSW Section: 14 Township: 1S Range: 66W Meridian: 6  
 County: ADAMS 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: 39.960115 Longitude: -104.748467  
 GPS Data:  
 Date of Measurement: 05/07/2010 PDOP Reading: 2.8 GPS Instrument Operator's Name: Paul Tappy  
 Reason for Abandonment:  Dry  Production for Sub-economic  Mechanical Problems  
 Other \_\_\_\_\_  
 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 |
|-----------|-----------|-----------|----------------|---------------------|------------|
| J SAND    | 8054      | 8064      |                |                     |            |

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          | 23              | 218           | 200          | 218        | 0          | VISU   |
| 1ST         | 7+7/8        | 4+1/2          | 15.1            | 8,167         | 200          | 8,167      | 7,470      | CALC   |
| S.C. 1.1    | 7+7/8        | 4+1/2          | 15.1            | 1,338         | 200          | 1,338      | 458        | CALC   |

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8004 with 2 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 20 sks cmt from 1390 ft. to 1190 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:   
Set \_\_\_\_\_ sks cmt from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Plug Type: \_\_\_\_\_ Plug Tagged:   
Perforate and squeeze at 6470 ft. with 100 sacks. Leave at least 100 ft. in casing 6420 CICR Depth  
Perforate and squeeze at 400 ft. with 60 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: \_\_\_\_\_  
\*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:

Will run CBL to determine actual cement tops.

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

Signed: \_\_\_\_\_ Print Name: Ross Snyder  
Title: Base Production Tech Date: 5/7/2013 Email: rsnyder@nobleenergyinc.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: BURN, DIANA Date: 5/23/2013

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

Expiration Date: 11/22/2013

NOTE CHANGES IN PLUGGING PROCEDURE - changes based on calculated cement tops - run CBL to confirm plugging procedures

- 1) Provide 24 hour notice of MIRU to Mike Hickey at 970-302-1024 or e-mail at Mike.Hickey@state.co.us.
- 2) For 1390' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 1190' or shallower. For 400' plug perforate, pump plug and displace and if not circulated to surface - tag plug must be 150' or shallower. Place 5 sx inside and outside of casing at surface if 400' plug not circulated to surface. Leave at least 100' cement in the casing for each plug.
- 3) Properly abandon flowlines as per Rule 1103.

**Attachment Check List**

| Att Doc Num | Name                        |
|-------------|-----------------------------|
| 400413631   | FORM 6 INTENT SUBMITTED     |
| 400414638   | WELLBORE DIAGRAM            |
| 400414639   | PROPOSED PLUGGING PROCEDURE |
| 400414640   | WELLBORE DIAGRAM            |

Total Attach: 4 Files

**General Comments**

| <b><u>User Group</u></b> | <b><u>Comment</u></b>   | <b><u>Comment Date</u></b>      |
|--------------------------|---|---------------------------------|
| Engineer                 | <p>LOCATION: SW1/4 OF SW1/4 OF SEC. 14, T.1s., R.66W. (990 SSL, 990 WSL)</p> <p>Ground Elevation: 5054 Number of Acres: 160</p> <p>ELEVATION DEPTH TO ANNUAL<br/>           ----- NET ----- APPROP STATUS<br/>           AQUIFER BOT. TOP SAND BOT. TOP A-F<br/>           -----<br/>           UPPER DAWSON ---- - - - - -<br/>           LOWER DAWSON ---- - - - - -<br/>           DENVER 5010 5071 26.2 44 -17 7.12 NNT<br/>           UPPER ARAPAHOE 4805 4970 32.6 249 84 8.86 NT<br/>           LOWER ARAPAHOE 4470 4730 102.5 584 324 27.87 NT<br/>           LARAMIE-FOX HILLS 3839 4062 183.7 1215 992 44.09 NT</p> <p>note: E indicates location is at aquifer boundary and values<br/>           may be more approximate.<br/>           Receipt=0403075, Permit=0197622-- 580'</p> | <p>5/23/2013<br/>5:39:59 PM</p> |
| Permit                   | Well completion or recompletion report # 339684 dated 7/24/1973   | 5/8/2013 8:31:25 AM             |

Total: 2 comment(s)