

Document Number:  
400699460

Date Received:  
10/01/2014

**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: 47120 Contact Name: CHERYL LIGHT

Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP Phone: (720) 929-6461

Address: P O BOX 173779 Fax: (720) 929-7461

City: DENVER State: CO Zip: 80217- Email: CHERYL.LIGHT@ANADARKO.COM

**For "Intent" 24 hour notice required,** Name: Carlile, Craig Tel: (970) 629-8279

**COGCC contact:** Email: craig.carlile@state.co.us

API Number 05-123-18848-00

Well Name: HSR-RADEMACHER Well Number: 14-30

Location: QtrQtr: SESW Section: 30 Township: 3N Range: 67W Meridian: 6

County: WELD Federal, Indian or State Lease Number: 64621

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: 40.191140 Longitude: -104.934270

GPS Data:  
Date of Measurement: 06/20/2007 PDOP Reading: 2.1 GPS Instrument Operator's Name: Steve Fisher

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

Casing to be pulled:  Yes     No    Estimated Depth: 930

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    | 7265      | 7275      |                |                     |            |
| NIOBRARA  | 7049      | 7050      |                |                     |            |

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          | 23              | 729           | 510          | 729        | 0          | VISU   |
| 1ST         | 7+7/8        | 3+1/2          | 7.7             | 7,411         | 395          | 7,411      | 6,448      | CBL    |
| S.C. 1.1    |              |                |                 | 4,994         | 165          | 4,994      | 3,603      | CBL    |

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6980 with 20 sacks cmt on top. CIBP #2: Depth 80 with 25 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 50 sks cmt from 4910 ft. to 3790 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 \_\_\_\_\_ 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 200 sacks half in. half out surface casing from 1030 ft. to 520 ft. Plug Tagged:   
Set 25 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:

2 MIRU slickline services. Pull bumper spring and tag bottom. RDMO slickline.  
 3 Prepare location for base beam equipped rig. Install perimeter fence as needed.  
 4 Check and record Bradenhead pressure. If Bradenhead valve is not accessible, re-plumb so that valve is above GL.  
 5 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt, LD.  
 6 TOOH and SB 2 1/16" production tubing (219 jts landed @ 7220').  
 7 MIRU wireline. Run gyro survey from 100' above PBD (~7372') recorded in step 2 to surface with stops every 100'. Forward gyro survey data and invoices to Sabrina Frantz.  
 8 RIH gauge ring for 3 1/2" 7.7 #/ft casing to 7000'. POOH.  
 9 Set CIBP at 6980' to abandon Codell and Niobrara perms. RDMO WL. Pressure test to 1,000 psi.  
 10 RIH 2 1/16" tubing to 6980' while hydrotesting to 3000 psi.  
 11 RU Cementers. Pump Niobrara plug: 20 sx (28 cuft) class "G" w/ 20% silica flour, 0.4% CD-32, 0.4% ASA-301 and R-3 to achieve 2:30 pump time mixed at 15.8 ppg and 1.38 cuft/sx (538' inside 3 1/2" csg, no excess). The plug will cover 6980' - 6442'. RD cementers.  
 12 PUH to 6200' and circulate tubing clean to ensure no cement is left in the tubing.  
 13 P & SB 4910' of 2 1/16" tubing, LD remainder.  
 14 RIH w/ 2 1/16" tubing to 4910'.  
 15 RU Cementers. Pump Sussex/Shannon balanced plug: 50 sx (58 cuft) class "G" w/ 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cuft/sx (1120' inside 3 1/2" csg, no excess). The plug will cover 4910' - 3790'. RD cementers.  
 16 PUH to 3600' and circulate with water to ensure no cement is left in the tubing.  
 17 WOC per cement company recommendation, tag cement, cement top needs to be above 3790'.  
 18 P & SB 1030' of 2 1/16" tubing, LD remainder.  
 19 RU WL. Shoot off casing at or below 930'. RDMO WL. Circulate to remove any gas.  
 20 NDBOP, NDTH. Install BOP on casing head with 3 1/2" pipe rams.  
 21 POOH with 930' of 3 1/2" casing, LD. Install 2 1/16" pipe rams.  
 22 RIH 100' past casing stub w/ 2 1/16" tubing to 1030'.  
 23 RU Cementers. Precede cement w/ 10 bbl SAPP and a 20 bbl fresh water spacer. Spot Fox Hills Stub plug: 200 sx (266 cuft) Type III w/cello flake and CaCl2 as deemed necessary, mixed at 14.8 ppg and 1.33 cuft/sx (100' inside 3 1/2" casing stub with no excess, 301' covering 9.5" OH from caliper with 20% excess, and 209' inside 8 5/8" surface casing with no excess). The plug will cover 1030' - 520'. RD cementers.  
 24 PUH to 200' and circulate with water to ensure no cement is left in the tubing.  
 25 WOC per cement company recommendation, tag cement, cement top needs to be above 520'.  
 26 MIRU WL. RIH 8 5/8" CIBP to 80'. Set and pressure test to 1000 psi for 15 minutes. RDMO WL and WO rig.  
 27 Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries to rscDJVendors@anadarko.com within 24 hrs of completion of the job.  
 28 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.  
 29 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.  
 30 Excavate hole around surface casing enough to allow welder to cut casing minimum 5' below ground level.  
 31 Welder cut casing minimum 5' below ground level.  
 32 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).  
 33 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.  
 34 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.  
 35 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.  
 36 Back fill hole with fill. Clean location, level.  
 37 Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed.

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

Signed: \_\_\_\_\_ Print Name: CHERYL LIGHT  
 Title: SR. REGULATORY ANALYST Date: 10/1/2014 Email: DJREGULATORY@ANADARKO.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: SCHLAGENHAUF, MARK Date: 10/24/2014

CONDITIONS OF APPROVAL, IF ANY: Expiration Date: 4/23/2015

| COA Type | Description  |
|----------|--|
|          | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.<br>2) If unable to pull casing contact COGCC for plugging modifications.<br>3) For 1030' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 679' or shallower.<br>4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.<br>5) Please submit gyro survey data with Form 6 (s) Subsequent Report of Abandonment. |

## Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u>                 |
|--------------------|-----------------------------|
| 400699460          | FORM 6 INTENT SUBMITTED     |
| 400699477          | PROPOSED PLUGGING PROCEDURE |
| 400699479          | WELLBORE DIAGRAM            |

Total Attach: 3 Files

## General Comments

| <u>User Group</u> | <u>Comment</u>                          | <u>Comment Date</u>       |
|-------------------|---|---------------------------|
| Permit            | Well Completion Report dated 3/24/1995. | 10/20/2014<br>12:18:39 PM |

Total: 1 comment(s)