

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

**COGCC contact:**

API Number 05-123-15704-00 Well Number: L12-2  
 Well Name: BELL  
 Location: QtrQtr: NWNE Section: 12 Township: 3N Range: 66W 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: 40.245630 Longitude: -104.722860  
 GPS Data:  
 Date of Measurement: 06/21/2006 PDOP Reading: 2.5 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: 1370  
 Fish in Hole:  Yes  No If yes, explain details below  
 Wellbore has Uncemented Casing leaks:  Yes  No If yes, explain details below  
 Details: Casing Patch at 6200'

**Current and Previously Abandoned Zones**

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
CODELL	7389	7404			
NIOBRARA	7098	7250			
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	24	502	290	502	0	CALC
1ST	7+7/8	2+7/8	8.7	7,537	200	7,537	6,758	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7020 with 25 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 25 sks cmt from 7020 ft. to 6100 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 4500 ft. with 270 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 660 sacks half in. half out surface casing from 1370 ft. to 302 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:

5 MIRU WO rig. Kill well as necessary with water and biocide. ND wellhead. NU BOP.  
 6 Unland 1.66" tbg (222 total joints landed at 7365') and TOOH standing back 7020' of 1.66" tubing.  
 7 MIRU wireline. RIH with junk basket/gauge ring (2-7/8" 8.7#) to 7070'. POOH. PU and RIH with CIBP (2-7/8", 8.7#) to set at 7020' (collars at 7006' and 7036'). POOH.  
 8 Run gyro survey inside 2-7/8" production casing from 7000' (~100' above top Niobrara perms) to surface with stops every 100'. Forward gyro survey data and invoices to Sabrina Frantz. RDMO wireline.  
 9 MIRU hydrotester. Hydrotest 1.66" tubing to 3000psi while TIH open ended. Tag CIBP set at 7020'. PUH just above CIBP and circulate all gas out of the hole. Pumping water with biocide, pressure test the CIBP and production casing to 2500psi for 15 minutes. If pressure test passes, proceed to next step; otherwise contact engineering for revised procedure steps to hydrotest 2-7/8" casing back in hole to spot stub plug prior to step 18.  
 10 MIRU cementing services. Establish circulation with water and pump 25 sx Class "G" cement with 20% silica flour, 0.4% CD-32 and 0.4% ASA-301 mixed at 15.8ppg and 1.38 cuft/sx (cement volumes based on 2-7/8" 8.7# casing capacity from 7020' to 6000' with no excess). Displace cement to estimated TOC at 5780' using approx. 10.5 bbls water. TOOH so EOT at +/- 5580'. Reverse circulate using approx. 21 bbls water (2 times tubing volume) or until returns are clean. RDMO cementing services.  
 11 TOOH and lay down all 1.66" tubing.  
 12 MIRU wireline. PU and RIH with 1-11/16" perf guns and shoot squeeze holes at 4500' using 6 SPF, 0.37" EHD, 1' net, 6 total shots. POOH with perf guns. RDMO wireline.  
 13 Establish circulation to through squeeze holes to surface with water. If circulation is established, proceed to next step; otherwise contact engineering for revised procedure steps.  
 14 MIRU cementing services on the 2-7/8" production casing. Establish circulation with water and pump 20 bbls sodium metasilicate followed by 270 sx Class "G" cement with 0.25 pps cello flake, 0.4% CD-32 and 0.4% ASA-301 mixed at 15.8ppg and 1.15 cuft/sx (cement volumes based on 11" caliper plus 20% excess from 4500' to 4100' and 2-7/8" 8.7# casing capacity from 4500' to 4100'). Drop wiper plug and displace to 4100' using 20 bbls water. RDMO cementing services. WOC to set up per cementing company recommendation.  
 15 MIRU wireline. RIH with sinker bars to tag cement plug @ +/- 4100'. If cement is not above 4100' contact engineer, otherwise proceed to next step.  
 16 RIH and jet cut 2-7/8" production casing at 1370'. RDMO wireline. Circulate bottoms up and continue circulating to remove any gas from wellbore.  
 17 ND BOP. Install BOP on surface casing head with 2-7/8" pipe rams. Install 3000 psi ball valves on both casing head outlets. Install a choke or choke manifold on one outlet.  
 18 MIRU cementing services. Establish circulation through 2-7/8" casing with water and pump 10 bbls SAPP mud flush, 20 bbls fresh water spacer, then balanced stub plug using 660 sx Type III cement with cello flake and CaCl2 as necessary, mixed at 14.8 ppg and 1.33 cuft/sx (cement volumes based on 868' in 11" hole with 40% excess, and 200' in 8-5/8" surface casing). RDMO cementing services.  
 Bell L 12-2: Plug & Abandonment  
 19 TOOH and LD 2-7/8" casing until end of casing is at +/- 200'. Circulate down 2-7/8" production casing and up surface casing/production casing annulus until returns are clean to ensure CIBP can be set in clean surface casing. Finish TOOH and LD 2-7/8" casing. WOC to set up per cementing company recommendation.  
 20 PU and TIH with 2-7/8" workstring to tag cement plug at +/- 302'. If cement is not above 302' contact engineer, otherwise proceed to next step.  
 21 MIRU wireline. PU and RIH with CIBP (8-5/8", 24#/ft). Set CIBP at 80' and pressure test the CIBP to 1000psi for 15mins. If pressure test fails contact engineering, otherwise proceed to next step.  
 22 RDMO wireline. RDMO WO rig.

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: 10/21/2014 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: 11/19/2014

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_ Expiration Date: 5/18/2015

<u>COA Type</u>	<u>Description</u>
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) If unable to pull casing contact COGCC for plugging modifications. 3) For 1370' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 450' or shallower. 4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete. 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>
400713730	FORM 6 INTENT SUBMITTED
400713732	PROPOSED PLUGGING PROCEDURE
400713733	WELLBORE DIAGRAM

Total Attach: 3 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Added sq w/ 270 sxs @ 4500 from procedure to form 6	11/19/2014 8:52:33 AM
Permit	Well Completion Report dated 9/21/1992 & 7/8/1996.	10/29/2014 2:06:48 PM

Total: 2 comment(s)