

**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.

Document Number:  
400676189

Date Received:  
08/29/2014

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: (303) 8942100

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

API Number 05-123-15889-00 Well Number: H 19-05

Well Name: WARDELL

Location: QtrQtr: SWNW Section: 19 Township: 3N Range: 65W 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: 40.212607 Longitude: -104.713398

GPS Data:  
Date of Measurement: 08/18/2014 PDOP Reading: 1.8 GPS Instrument Operator's Name: Bart Pfiefer

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

Other Re-enter and Plug

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: This well was originally abandoned in 07/08/2004 with production casing cut off at 5996'. Well is to be re-entered to add cement plugs above the Niobrara. Purpose is to reenter and adequately replug prior to hydraulic stimulation of proposed horizontal well per DJ Basin Offset Policy dated December 16, 2013.

**Current and Previously Abandoned Zones**

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
CODELL	7410	7420	07/08/2004	B PLUG CEMENT TOP	7036
NIOBRARA	7136	7285	07/08/2004	B PLUG CEMENT TOP	7036

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	655	460	655	0	VISU
1ST	7+7/8	2+7/8	6.5	7,553	250	7,553	6,424	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 80 with 25 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 5980 ft. to 5800 ft. Plug Type: OPEN HOLE Plug Tagged:   
Set 330 sks cmt from 4780 ft. to 4370 ft. Plug Type: OPEN HOLE Plug Tagged:   
Set 440 sks cmt from 1430 ft. to 450 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:   
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 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:

Closed loop system will be used.  
 Re-plug and re-entry procedure attached  
**PLUG AND ABANDONMENT PROCEDURE/RE-ENTER  
 WARDELL H 19-5**  
 Step Description of Work  
 1 Locate and expose 8 5/8" casing stub. Extend stub to surface and install 8 5/8"x 11" SOW, 3M casing head with 3000 psi ball valves in both outlets. Prepare location for workover rig. Install perimeter fence as needed.  
 2 Provide notice to COGCC prior to rig up per request on approved Form 6 (e.g. call field coordinator, submit Form 42, etc.).  
 3 MIRU workover rig. NU 9" 3000 psi BOP stack on casing head. PT BOP and csg head per approved Form 2. Function test BOPE . NU rotating head on BOP. Hook up return line to shale shaker on flat tank  
 4 PU 7 7/8" mill tooth bit, necessary drill collars and drill pipe/work string (WS). Drill through existing cement plugs at surface (10 sk) and at the base of surface casing (100 sk plug ~540'-702') using fresh water with biocide.  
 5 Once surface cement plugs are drilled, Displace hole with drilling mud and continue going in hole. Drill out Cement plug at 3400'-3500'.  
 6 RIH to stub of 2 7/8" casing @ 5996'. TOH and LD drill collars and bit.  
 7 RIH WS open-ended to 5980'. Circulate and condition hole for additional cement plug.  
 8 Run gyro survey from PBTD to surface.  
 9 RU Cementers. Spot cement plug consisting of 100 sx "G" w/20% silica flour, 0.4 % CD-32, 0.4% ASA-301 and R-3 To achieve 2:30 pump time. Mix at 15.8 ppg and 1.38 cuft/sack. Calculated top of plug 5800' based on 10" hole with 40% excess. Caliper log from offset well. POH to ~5000' and circulate clean. WOC per cement company recommendation.  
 10 Tag top of plug at 5800'. TOH to 4780'  
 11 Spot cement plug consisting of 330 sx "G" w/0.25pps cello flake, 0.4% CD-32, 0.4% ASA-301 with CaCl2 as necessary. Mixed at 15.8 ppg, 1.15 cuft/sack. Cement to be preceded by sodium metasilicate mixed in 20 bbls water per cementing company recommendation. Calculated top of plug 4370' based on 11" hole with 40% excess.  
 12 POOH to ~ 3000' and circulate clean. WOC per cement company recommendation. Tag plug at 4370'. LD WS to place end of WS at 1430'.  
 13 Spot cement plug consisting of 440 sx Type III w/cello flake and CaCl2 as deemed necessary, mixed at 1.53 cf per sack, 14.0 ppg. POH and WOC per cementing company recommendation. Plug size is based on 10" hole with 40% excess covering 1430' to shoe of surface casing at 655' plus capacity of surface casing to 450'. TOH and WOC per cement company recommendation  
 14 Tag top of plug at 450'. POOH and LD WS.  
 15 RU wireline. Run and set CIBP in the 8 5/8", 24# surface casing at 80'. PT CIBP and surface casing to 1000 psi for 15 minutes. Assuming successful test, RD wireline.  
 16 RDMO workover rig.  
 17 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.  
 18 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.  
 19 Excavate hole around surface casing of sufficient size to allow welder to cut off 8 5/8" casing at least 5' Below ground level (depending on land owner requirements).  
 20 Fill surface casing with cement (4500 psi compressive strength, no gravel).  
 21 Spot weld steel marker plate on top of sfc casing stub. Marker shall be labeled with well name, well number, legal location (1/4 1/4 descriptor) and API number.  
 22 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.  
 23 Back fill hole with native material. Reclaim location to landowner specifications  
 24 Submit Form 6 to COGCC. Provide "As plugged" wellbore diagram identifying the specific plugging 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: 8/29/2014 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: 9/12/2014

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_ Expiration Date: 3/11/2015

<u>COA Type</u>	<u>Description</u>
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) For 1430' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 600' or shallower. 3) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete. 4) Please submit gyro survey data with Form 6 (s) Subsequent Report of Abandonment. 5) Operator must provide well location GPS coordinates on Subsequent Report of Abandonment in accordance with COGCC As-Built Location Policy and Rule 215.

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400676189	FORM 6 INTENT SUBMITTED
400676214	SURFACE OWNER CONSENT
400676215	LOCATION PHOTO
400676217	PROPOSED PLUGGING PROCEDURE
400676218	WELLBORE DIAGRAM

Total Attach: 5 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 1/21/1991. SRA dated 7/21/2004.	3/4/2014 2:00:10 PM

Total: 1 comment(s)