

FORM  
6Rev  
12/05State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

400547614

Date Received:

01/30/2014

## 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 &amp; 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: MONTOYA, JOHN

Tel: (970) 3974124

COGCC contact:

Email: john.montoya@state.co.us

API Number 05-123-19398-00

Well Name: HSR-LINK

Well Number: 6-13

Location: QtrQtr: SENW Section: 13 Township: 1N Range: 63W 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: 40.052756

Longitude: -104.386895

GPS Data:

Date of Measurement: 09/10/2008

PDOP Reading: 2.6

GPS Instrument Operator's Name: Renee Doiron

Reason for Abandonment:

☐ Dry☒ Production for Sub-economic☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes☐ No

Estimated Depth: 1300

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
NIOBRARA	6446	6557			
D SAND	7063	7071	04/28/2011	BRIDGE PLUG	6790

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	804	565	804	0	VISU
1ST	7+7/8	4+1/2	11.6	7,205	320	7,233	5,310	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6790 with 60 sacks cmt on top. CIBP #2: Depth 170 with 2 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 60 sks cmt from 6790 ft. to 5850 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 4000 ft. with 320 sacks. Leave at least 100 ft. in casing 4030 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 210 sacks half in. half out surface casing from 1400 ft. to 600 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:

Perforate and squeeze at 4915 & 4000 ft. with 320 sacks Leave at least 100 ft. in casing 4030 CICR Depth  
 HSR-Link 6-13 05-123-19398– P&A Procedure  
 6 Notify cementers to be on call. Provide volumes (60 sx of “G” w/ 20% silica flour, 0.4% CD-32, 0.4% ASA-301 and 0.4% R-3 mixed at 15.8 ppg and 1.38 cuft/sx; 320 sx of Neat “G” mixed at 15.8 ppg and 1.15 cuft/sx; 210 sx of Type III w/ CaCl<sub>2</sub> mixed at 14.0 ppg and 1.53 cuft/sk).  
 7 MIRU WO rig. Unseat pump and kill well using water and biocide.  
 8 Trip out of the hole and LD rods and pump. Fish rod string as necessary.  
 9 Call Vaughn Energy Services. RIH with gyro, tag CIBP @ 6790', and run tool to surface with stops every 100'. Forward gyro survey data to Sabrina (Sabrina.Frantz@anadarko.com). Move out VES.  
 10 ND wellhead. NU BOP.  
 11 Release tbg anchor @ 6317'.  
 12 PUH w/ tbg to break any sand bridges, noting not to exceed the safety tensile load for 2.375", 4.7#, J-55 tbg of 57,384 lbs (80% of upset joint yield strength).  
 13 MIRU "EMI equipment". TOOH with 2-3/8" tubing. EMI tubing while TOOH. Lay down joints with wall loss or penetrations >35%. Replace joints as necessary. \*\*Keep yellow & blue band tubing. Note joint number and depth of tubing leak(s) on PRODUCTION EQUIPMENT FAILURE REPORT IN OPEN WELLS.  
 14 SB a min of 6800' of tbg for bottom plug. LD remainder.  
 15 PU and RIH with csg scraper and 3 3/4" drill bit to ± 6700'. TOOH.  
 16 Hydrotest tbg while RIH. Tag CIBP (+/- 6790) and PUH 5'.  
 17 MIRU Cement services.  
 18 Balance 60 sx (~ 15 bbls) of cement of “G” w/ 20% silica flour, 0.4% CD-32, 0.4% ASA-301 and 0.4% R-3 mixed at 15.8 ppg and 1.38 cuft/sx.  
 19 PUH approx. 1100' and reverse circulate to get any cement out of the casing with a min 9.0 ppg drilling mud.  
 20 PU & SB tubing for next depth (4915'), LD remainder.  
 21 RU WL. PU two 3 -1/8" x 1' perf guns loaded with 2 charges of 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 4915' and 4000'. RD WL  
 22 PU CICR on production tubing and set at 4030'. Initiate circulation through CICR using water containing biocide. Note rate and pressure.  
 23 RU Cement Services.  
 24 Pump 20 bbl Sodium Metasilicate immediately preceding cement.  
 25 Pump 320 sx (~47 bbls) plug of Neat “G” mixed at 15.8 ppg and 1.15 cuft/sx. Underdisplace by 3 bbls, unsting from retainer and dump remaining on top of CICR.  
 26 PUH approx. 2000' and reverse circulate to get any cement out of the casing with a min 9.0 ppg drilling mud.  
 27 PU & SB tubing for next depth (1400'), LD remainder. RDMO Cementer.  
 28 MIRU WL. Break collar at the “closest joint” to 1300' (500' below Surface CSG). RDMO WL.  
 29 ND BOP & tbg head.  
 30 NU BOP w/ 4.5" pipe rams on the 8.625" csg head.  
 31 PU csg. Circulate wellbore with fresh water and biocide. TOOH and LD 4.5" csg. If unable to pull production csg contact Production Engineer for procedure modification. (Dave.Hughey@Anadarko.com)  
 32 TIH with tbg open ended to land EOT 1400' inside of the production casing.  
 33 MIRU cementer. Balance 210 sx (~57 bbls) plug (100' of 4.5" 11.6# 0.0155 bbl/ft prod. csg capacity, 500' of 8.5" 0.0702 bbl/ft estimated hole capacity & 20% excess, 204' of 8.63" 24# 0.0636 bbl/ft surface csg capacity) of cement (Type III w/ CaCl<sub>2</sub> mixed at 14.0 ppg and 1.53 cuft/sk) from 1400' inside the 4.5" stub to 600' inside surface casing (plug from 1400'-600'). TOOH w/ tubing and stand back 100' tbg in derrick. LD remainder. RDMO Cementer.  
 34 WOC 4 hours or overnight.  
 35 TIH with tbg and tag cement plug. Record tagging plug in Openwells report. Lay down all tbg. NOTE: if TOC is below 600' contact Production Engineer for prog modification.  
 36 RU WL. Set 8.625" CIBP at approximately 100' (inside surface csg). Pressure test CIBP to 1000 psi for 15 min.  
 37 RDMO WO rig.  
 38 Have excavation contractor notify One-Call to clear for digging around wellhead and flowline removal.  
 39 Excavate hole around surface casing of sufficient size and depth to allow welder to cut off 8.625" surface casing.

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: 1/30/2014 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: 2/4/2014

CONDITIONS OF APPROVAL, IF ANY: \_\_\_\_\_ Expiration Date: 8/3/2014

<u>COA Type</u>	<u>Description</u>
	<p>Note changes to plugging procedure:</p> <ol style="list-style-type: none"> <li>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</li> <li>2) If unable to pull casing, contact COGCC for plugging modifications.</li> <li>3) For 1400' plug: pump plug and displace. Wait 4 hours then tag plug – must be 750' or shallower.</li> <li>4) Move CIBP@100' down to 170' to isolate Arapahoe aquifer from Laramie-Fox Hills Aquifer. Adjust cement volume above CIBP accordingly.</li> <li>5) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.</li> <li>6) Submit corrected Operator's Monthly Production Reports (Form 7) required for compliance with Rule 309 within 30 days.</li> <li>7) Please submit gyro survey data with Form 6 (s) Subsequent Report of Abandonment.</li> </ol>

### **Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
400547614	FORM 6 INTENT SUBMITTED
400547634	PROPOSED PLUGGING PROCEDURE
400547635	WELLBORE DIAGRAM

Total Attach: 3 Files

### **General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Old style comp. rept. #26739 sub. 6/98 and completed interval rpt.#26747, sub. 8/98 meet form 5/5A requirements.	1/30/2014 12:42:32 PM

Total: 1 comment(s)