

FORM  
6Rev  
12/05

## State 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:

400816535

Date Received:

03/27/2015

## 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: Carlile, Craig

Tel: (970) 629-8279

COGCC contact:

Email: craig.carlile@state.co.us

API Number 05-123-17097-00

Well Name: WARDELL

Well Number: 20-41

Location: QtrQtr: NESE Section: 20 Township: 3N Range: 65W Meridian: 6

County: WELD

Federal, Indian or State Lease Number: 59722

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: 40.209823

Longitude: -104.680411

GPS Data:

Date of Measurement: 01/17/2007

PDOP Reading: 3.3

GPS Instrument Operator's Name: David Gipson

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

Estimated Depth: 1235

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	7206	7216			

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	24	623	440	623	0	VISU
1ST	7+7/8	3+1/2	9.3	7,362	160	7,362	6,450	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7140 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 25 sks cmt from 7140 ft. to 6500 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 4610 ft. with 285 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 475 sacks half in. half out surface casing from 1335 ft. to 520 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:

4 This well has a gyro from Oct 26, 2014  
5 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt, LD. Tbg is landed @ 7182' KB w/ 224 jts.  
6 TOO and stand back 1.9" tbg.  
7 MIRU WL. RIH gauge ring for 3 1/2" 9.3# casing to 7200'. POH.  
9 RIH 3 1/2" CIBP and set @ 7140' to abandon Codell perms. Pressure test CIBP and casing to 3000 psi for 15 minutes. RDWL.  
10 TIH w 1.9" tbg open ended to CIBP at 7140'. Hydro -test tbg to 3000 psi.  
11 RU cementers and equalize a balanced plug above CIBP from 7140' to 6500' as follows: 25 sx "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/sk. (31 cuft of slurry).  
12 POH to ~6300 and circulate tbg clean using fresh water treated with biocide. TOO and LD all 1.9" tbg.  
13 RUWL. PU 2' 2-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 2' of squeeze holes at 4610'.  
15 RU Cementers. Establish circulation to surface with fresh water treated with biocide. If circulation cannot be established contact Evans engineering before proceeding. Pump 5 bbl water w/ biocide, 20 bbl Sodium Metasilicate, and another 5 bbl spacer immediately preceding cement.  
16 Pump Sussex Squeeze: 285 sx class "G", w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cuft/sk (215 cuft of slurry) to place cement to 4000'. Cement volume based on 9.25" hole with 20% excess. Caliper log dated 7/12/93 on file. Displace with wiper plug to 4000'. WOC per cementing companies recommendations.  
18 RU WL. Tag wiper plug at ~4000'. Crack coupling or cut casing at 1235'. RDMO WL. Circulate bottoms up and continue circulating to remove any gas from wellbore.  
19 ND BOP and wellhead. Install BOP on surface casing head with 3 1/2" pipe rams. Install 3000 psi ball valves on both casing head outlets. Install a choke or choke manifold on one outlet.  
20 TOO and LD 1235' of 3 1/2" casing.  
21 RIH with 1.9" tubing open-ended to 1335' (100' inside 3 1/2" stub).  
22 RU cementers. Establish circulation with fresh water treated with biocide. If circulation cannot be established contact Evans engineering before proceeding. Pump 10 bbl SAPP (Sodium Acid Pyrophosphate) followed by 20 bbl (min.) fresh water spacer immediately preceding cement.  
23 Pump balanced Stub Plug to surface: 475 sx Type III w/0.25#/sk cello flake and CaCl<sub>2</sub> as deemed necessary mixed at 14.8 ppg and 1.33 cf/sx (630 cuft of slurry). Cement volume based on 100' in 3 1/2" csg, 623' in 8 5/8" csg, and 612' in 9.25" OH + 40% excess. (based on 9.25" OH with 40% excess from caliper log 7/12/93). We should circulate cement to surface.  
24 TOO. WOC per cementing company recommendation. Tag Cement. TOC should be at 520' or above. If not, consult Evans Engineering.  
25 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.  
26 Supervisor submit paper copies of all invoices, logs, and reports to Evans Engineering Specialist.  
27 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.  
28 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.  
29 Welder cut 8 5/8" casing minimum 5' below ground level.  
30 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).  
31 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.  
32 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.  
33 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.  
34 Back fill hole with fill. Clean location, level.  
35 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: 3/27/2015 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: 4/17/2015

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_ Expiration Date: 10/16/2015

COA Type	Description
	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 1335' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 550' or shallower. 4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete. 5) Please submit existing gyro survey data with Form 6 (s) Subsequent Report of Abandonment.

### Attachment Check List

**Att Doc Num****Name**

400816535	FORM 6 INTENT SUBMITTED
400816542	PROPOSED PLUGGING PROCEDURE
400826887	WELLBORE DIAGRAM

Total Attach: 3 Files

### General Comments

**User Group****Comment****Comment Date**

Engineer	Pushed back to draft due to inconsistencies between WBD and procedure and COGCC file. Also depths missing from WBD.	4/16/2015 11:00:34 AM
Permit	Well Completion Report dated 11/2/1993.	4/2/2015 9:33:46 AM

Total: 2 comment(s)