

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:

400713766

Date Received:

10/21/2014

## 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: Carlile, Craig

Tel: (970) 629-8279

COGCC contact:

Email: craig.carlile@state.co.us

API Number 05-123-16250-00

Well Name: OPATRIL

Well Number: 12-9L

Location: QtrQtr: NESE Section: 12 Township: 3N Range: 67W 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: 40.236630

Longitude: -104.831590

GPS Data:

Date of Measurement: 07/10/2007

PDOP Reading: 3.5

GPS Instrument Operator's Name: Paul Tappy

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

Estimated Depth: 990

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	7297	7307			
NIOBRARA	7004	7169			

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	513	250	513	0	VISU
1ST	7+7/8	4+1/2	11.6	7,411	195	7,411	6,460	CBL

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6940 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 6940 ft. to 6575 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 320 sacks. Leave at least 100 ft. in casing 4060 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 350 sacks half in. half out surface casing from 1090 ft. to 310 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 and pressure bomb services. Pull bumper spring, tag bottom and run pressure bomb survey from surface to 7150' making gradient stops every 1000'. Forward pressure bomb results to Evans Engineering. RDMO pressure bomb services. MIRU VES and run gyro stopping every 100' from tagged depth to surface. Forward survey results to Sabrina Frantz. RDMO slickline services and VES.

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. NDWH. NUBOP. Unseat landing jt, LD.

6. Notify cementers to be on call. Provide volumes listed below:

6.1 Niobrara plug: 25 sx (35 cu-ft) "G" w/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 cu-ft/sk. Cement volume based on 365' in 4 1/2" casing.

6.2 Sussex suicide: 320 sx (368 cu-ft) "G" w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301, mixed at 15.8 ppg and 1.15 cu-ft/sk. Cement volume based on 410' in 4 1/2" casing and 410' in an 11" OH with 20% excess. Caliper on file.

6.3 Foxhills plug: 350 sx (466 cu-ft) Type III w/cello flake and CaCl<sub>2</sub> as necessary, mixed at 14.8 ppg and 1.33 cu-ft/sk. Cement volume based on 100' in 4 1/2" casing, 480' in an 11" OH with 20% excess, and 200' in 8 5/8" casing. Caliper on file.

7. TOOH 229 joints of 2 3/8" tubing landed at 7294'. Stand back.

8. MIRU WL. RIH gauge ring for 4 1/2" 11.6# casing to 6990'. POOH.

9. PU 4 1/2" 11.6# CIBP and RIH w/WL. Set at +/-6940' to abandon Niobrara and Codell perms. PT to 1000 psi.

10. RIH with 2 3/8" tubing to +/- 6940', tag CIBP and PUH 5'. Hydrotest tubing to 3000 psi while RIH.

11. RU cementers. Pump Niobrara plug: 25 sx (35 cu-ft) "G" w/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 cu-ft/sk. Plug to cover 6940'-6575'.

12. PUH to ~6300'. Circulate with water containing biocide to displace cement and clear tubing.

13. POOH. Stand back 4060' of tubing.

14. RU WL. PU 3 1/8" perf guns with 3 spf, 120 degree phasing, 0.42" EHD and RIH w/WL. Shoot 1' of squeeze holes at 4500' and 4030. RD WL.

15. PU and RIH w/CICR on 2 3/8" tubing, set CICR at ~4060'. Establish circulation w/rig pump using freshwater containing biocide.

16. RU cementers. Precede cement with 5 bbl water containing biocide, 20 bbl sodium metasilicate and another 5 bbl water spacer.

17. Pump Sussex suicide: 320sx (368 cu-ft) "G" w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301, mixed at 15.8 ppg and 1.15 cu-ft/sk to place cement between perms from 4500' to 4030'. Under displace and sting out of CICR to leave 3 bbls (~200') on top of retainer. Cement volume based on 11" OH with 20% excess. Caliper on file. RD cementers.

18. PUH to ~3500'. Circulate with water containing biocide to displace cement and clear tubing.

19. P&SB 1090', LD remainder.

20. RU WL. Shoot off 4 1/2" casing at or below 990'. RD WL. Circulate casing with water containing biocide to remove any gas.

21. NDBOP, NDTH.

22. Install BOP on casing head with 4 1/2" pipe rams.

23. TOOH 4 1/2" casing, LD.

24. RIH with 2 3/8" tubing to 1090' inside 4 1/2" casing.

25. RU cementers. Precede cement with 10 bbl SAPP and a minimum 20 bbl fresh water spacer. Pump Foxhills plug: 350 sx (466 cu-ft) Type III w/ cello flake and CaCl<sub>2</sub> as necessary, mixed at 14.8 ppg and 1.33 cu-ft/sk. Plug to cover 1090'-990' in 4 1/2" casing, 990'-510' in 11" OH with 20% excess, and 510'-310' in 8 5/8" casing. Caliper on file. RD cementers.

26. PUH to 100' and circulate with water and biocide to displace cement and clear tubing.

27. WOC per cement company recommendation. Tag cement at or above 310'. If not, consult with Evans Engineering.

28. RU WL. RIH 8 5/8" 23# CIBP to 80'. Set and pressure test to 1000 psi for 15 minutes. If tests, RDMO WL and 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: 11/21/2014

**CONDITIONS OF APPROVAL, IF ANY:** \_\_\_\_\_ Expiration Date: 5/20/2015

#### **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 1090' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 463' 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.
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### Attachment Check List

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

400713766	FORM 6 INTENT SUBMITTED
400713767	WELLBORE DIAGRAM
400713768	PROPOSED PLUGGING PROCEDURE

Total Attach: 3 Files

### General Comments

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

Permit	Well Completion Report dated 6/25/1993.	10/29/2014 3:26:45 PM
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Total: 1 comment(s)