

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:

400818337

Date Received:

03/31/2015

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 & 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 05-123-15645-00

Well Name: FORT SAINT VRAIN

Well Number: 19

Location: QtrQtr: NWSW Section: 9 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: 40.238560

Longitude: -104.902820

GPS Data:

Date of Measurement: 12/09/2006

PDOP Reading: 2.4

GPS Instrument Operator's Name: Steve Fisher

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

Estimated Depth: 760

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	7086	7098			
NIOBRARA	6883	6889			

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	512	360	512	0	VISU
1ST	7+7/8	4+1/2	12.6	7,200	160	7,200	6,250	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6810 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 6810 ft. to 6410 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 4250 ft. with 310 sacks. Leave at least 100 ft. in casing 3730 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 860 ft. to 412 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:

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 biocide treated water. 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/ 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 cu-ft/sk yield. Cement volume based on 400' in 4 1/2" casing.

6.2 Sussex suicide: 310 sx (357 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 yield. Cement volume based on 750' in 4 1/2" casing and 550' in a 10" OH with 20% excess. Caliper on file.

6.3 Foxhills plug: 210 sx (279 cu-ft) Type III w/ cello flake and CaCl₂ as necessary, mixed at 14.8 ppg and 1.33 cu-ft/sk yield. Cement volume based on 100' in 4 1/2" casing, 248' in a 10" OH with 40% excess, and 200' in 8 5/8" casing. Utilized caliper readings from 3800' – 4250'.

7. Release packer set at 6812'. TOOH 2 3/8" tubing landed at 7037' and packer. Stand back 2 3/8" tubing and lay down packer.

8. MIRU WL. PU 4 1/2" 12.6# CIBP and RIH w/ WL. Set at +/- 6810' to abandon Niobrara and Codell perms. PT to 1000 psi for 15 minutes. RDMO WL.

9. RIH with 2 3/8" tubing to +/- 6810', tag CIBP and PUH 5'. Hydrotest tubing to 3000 psi while RIH.

10. RU cementers. Pump Niobrara plug: 25 sx (35 cu-ft) "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 cu-ft/sk yield. Plug to cover 6410' – 6810'.

11. PUH to +/- 6200'. Reverse circulate with biocide treated water to displace cement and clear tubing.

12. POOH. Stand back 3730' of tubing. TOC – 6250'

13. RU WL. PU 3 1/8" perf guns with 3 spf, 120 degree phasing, 0.50" EHD and RIH w/ WL. Shoot 1' of squeeze holes at 4250' and 2' of squeeze holes at 3700'. RD WL.

14. PU and RIH w/CICR and 2 3/8" tubing, set CICR at +/- 3730'. Establish circulation with rig pump using biocide treated water.

15. RU cementers. Establish circulation with biocide treated water and precede cement with 5 bbl water containing biocide, 20 bbl sodium metasilicate and another 5 bbl water spacer.

16. Pump Sussex suicide: 310 sx (357 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 yield to place cement between perms from 4250' to 3700'. Under displace and sting out of CICR to leave 3 bbls (~200') on top of retainer. Cement volume based on 10" OH with 20% excess. Caliper readings across part of interval. RD cementers.

17. PUH to +/- 3300'. Reverse circulate with biocide treated water to displace cement and clear tubing.

18. POOH. Stand back 860' of tubing.

19. RU WL. Shoot off 4 1/2" casing at or below 760'. RD WL. Circulate casing with biocide treated water to remove any gas.

20. NDBOP, NDTH.

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

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

23. RIH with 2 3/8" tubing to 860' inside 4 1/2" casing.

24. RU cementers. Establish circulation with biocide treated water and precede cement with 10 bbl SAPP and a minimum 20 bbl fresh water spacer. Pump Foxhills plug: 210 sx (279 cu-ft) Type III w/ cello flake and CaCl₂ as necessary, mixed at 14.8 ppg and 1.33 cu-ft/sk. Plug to cover 860' – 760' in 4 1/2" casing, 760' – 512' in 10" OH with 40% excess, and 512' – 312' in 8 5/8" casing. Utilized caliper readings from 3800' – 4250'. RD cementers.

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

26. WOC per cement company recommendation. Tag cement at or above 412'. If not, consult with Evans Engineering.

27. RU WL. RIH 8 5/8" 24# CIBP to 80'. Set and pressure test to 1000 psi for 15 minutes. If tests, RDMO WL and WO rig.

28. Instruct cementing and wireline contractors to email copies of all job logs/jobs summaries to rscDJVendors@anadarko.com within 24 hours of completion of the job.

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: 3/31/2015 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 860' 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 existing gyro survey data with Form 6 (s) Subsequent Report of Abandonment.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400818337	FORM 6 INTENT SUBMITTED
400818345	PROPOSED PLUGGING PROCEDURE
400818347	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 3/16/1993.	4/2/2015 10:07:01 AM

Total: 1 comment(s)