

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:

400806566

Date Received:

03/10/2015

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 05-123-08252-00

Well Name: MEANS RICHARD

Well Number: GU 1

Location: QtrQtr: SWSW Section: 15 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: 40.221120

Longitude: -104.882550

GPS Data:

Date of Measurement: 02/24/2007

PDOP Reading: 3.3

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: 870

Fish in Hole: ☐ Yes☒ No

If yes, explain details below

Wellbore has Uncemented Casing leaks: ☐ Yes☒ No

If yes, explain details below

Details: Perforated casing at 1500' and placed 400 sx class "G" for bradenhead remediation on 3/23/1994; coverage verified with CBL dated 1/19/2006. Pumped 150 sx regular cement on 2/23/2008 to repair casing leak at ~4450'; coverage not verified

Current and Previously Abandoned Zones

| Formation | Perf. Top | Perf. Btm | Abandoned Date | Method of Isolation | Plug Depth |
|-----------|-----------|-----------|----------------|---------------------|------------|
| CODELL | 7078 | 7098 | | | |
| J SAND | 7512 | 7548 | 01/18/2006 | | 7350 |

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 | 229 | 200 | 229 | 0 | VISU |
| 1ST | 7+7/8 | 4+1/2 | 10.5 | 7,673 | 200 | 7,673 | 6,788 | CBL |
| S.C. 1.1 | | | | 1,500 | 400 | 1,525 | 1,010 | CBL |
| S.C. 1.2 | | | | 4,450 | 150 | 4,450 | 3,950 | CALC |

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7350 with 2 sacks cmt on top. CIPB #2: Depth 7010 with 2 sacks cmt on top.
CIBP #3: Depth 80 with 25 sacks cmt on top. CIPB #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 20 sks cmt from 4600 ft. to 4350 ft. Plug Type: CASING Plug Tagged: ☒
Set 20 sks cmt from 1600 ft. to 1400 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: ☐

Perforate and squeeze at 6770 ft. with 120 sacks. Leave at least 100 ft. in casing 6430 CICR Depth
Perforate and squeeze at 4210 ft. with 290 sacks. Leave at least 100 ft. in casing 3830 CICR Depth
Perforate and squeeze at _____ ft. with _____ sacks. Leave at least 100 ft. in casing _____ CICR Depth

(Cast Iron Cement Retainer Depth)

Set 490 sacks half in. half out surface casing from 970 ft. to 129 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:

9. MIRU WL. PU dump bailer, dump bail 2 sx class "G" cement on top of sand plug at +/- 7350' to abandon J Sand perfs. POOH.
 10. PU 4 1/2" 10.5# CIBP and RIH w/ WL. Set at +/- 7010' to abandon Codell perfs. PT to 1000 psi for 15 minutes. PU dump bailer, dump bail 2 sx class "G" cement on CIBP. POOH.
 11. 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 6770' and 2' of squeeze holes at 6400'. POOH, RD WL.
 12. PU and RIH with CICR and 2 3/8" tubing, set CICR at +/- 6430'. Hydrotest tubing to 3000 psi while RIH. Establish circulation with rig pump using biocide treated water.
 13. RU cementers. Establish circulation with biocide treated water.
 14. Pump Niobrara suicide: 120 sx (205 cu-ft) 50/50 POZ "G" w/ 20% silica flour, 3% gel, 0.1% sodium metasilicate, and 0.4% FL-52, mixed at 13.5 ppg and 1.71 cu-ft/sk to place cement between perfs from 6770' to 6400'. Under displace and sting out of CICR to leave 3 bbls (~200') of cement on top of retainer. Cement volume based on 9" OH with 20% excess. Caliper readings across entire interval. RDMO cementers.
 15. PUH to +/- 6000'. Reverse circulate with biocide treated water to displace cement and get all gas out of hole for CBL.
 16. POOH. Stand back 4600' of tubing.
 17. RU WL. Run CBL from 6000' to surface to verify cement coverage from 2008 squeeze job. If CBL results differ from wellbore diagram, contact Evans Engineering. Cement interval for Sussex suicide may change based on CBL. RD WL.
 18. RIH with 2 3/8" tubing to +/- 4600'.
 19. RU cementers. Pump bottom casing leak plug: 20 sx (23 cu-ft) "G" w/ 0.4% CD-32, 0.4% ASA-301, mixed at 15.8 ppg and 1.15 cu-ft/sk. Plug to cover 4350' – 4600'. Note: Leak found at +/- 4450' on 2/23/2008.
 20. PUH to +/- 4100'. Reverse circulate with biocide treated water to displace cement and clear tubing.
 21. WOC per cement company recommendation. Tag cement at or above 4350'. If not, consult with Evans Engineering.
 22. POOH. Stand back 3830' of tubing.
 23. 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 4210' and 2' of squeeze holes at 3800'. RD WL.
 24. PU and RIH w/CICR and 2 3/8" tubing, set CICR at +/- 3830'. Establish circulation with rig pump using biocide treated water.
 25. 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.
 26. Pump Sussex suicide: 290 sx (334 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 perfs from 4210' to 3800'. 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 readings across part of interval. RD cementers.
 27. PUH to +/- 3400'. Reverse circulate with biocide treated water to displace cement and clear tubing.
 28. PUH to +/- 1600'.
 29. RU cementers. Pump top squeeze hole plug: 20 sx (27 cu-ft) Type III w/ CaCl2 as necessary, mixed at 14.8 ppg and 1.33 cu-ft/sk. Plug to cover 1300' – 1600'. Note: Casing perforated at 1500' for bradenhead remediation on 3/23/1994.
 30. PUH to +/- 1000'. Reverse circulate with biocide treated water to displace cement and clear tubing.
 31. WOC per cement company recommendation. Tag cement at or above 1400'. If not, consult with Evans Engineering.
 32. POOH. Stand back 970' of tubing.
 33. RU WL. Shoot off 4 1/2" casing at or below 870'. RD WL. Circulate casing with biocide treated water to remove any gas.
 34. NDBOP, NDTH.
 35. Install BOP on casing head with 4 1/2" pipe rams.
 36. TOOH 4 1/2" casing, LD.
 37. RIH with 2 3/8" tubing to +/- 970' inside 4 1/2" casing.
 38. 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: 490 sx (652 cu-ft) Type III w/ cello flake and CaCl2 as necessary, mixed at 14.8 ppg and 1.3

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: 3/10/2015 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: 3/14/2015

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 9/13/2015

| 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 970' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 179' 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> |
|--------------------|-----------------------------|
| 400806566 | FORM 6 INTENT SUBMITTED |
| 400806575 | PROPOSED PLUGGING PROCEDURE |
| 400806578 | WELLBORE DIAGRAM |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|-------------------------|
| Permit | Well Completion Report dated 2/25/1975 & Sundry Notice dated 1/20/2006. | 3/12/2015 9:58:36 AM |

Total: 1 comment(s)