FORM 6 Rev 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: 400808362

Date Received: 03/12/2015

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, COGCC contact: Name: Carlile, Craig Tel: (970) 629-8279 Email: craig.carlile@state.co.us

API Number 05-123-21818-00

Well Name: RUSCH Well Number: 33-15

Location: QtrQtr: NWSE 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: 40.224267 Longitude: -104.875126

GPS Data:

Date of Measurement: 06/17/2009 PDOP Reading: 2.2 GPS Instrument Operator's Name: Paul Tappy

Reason for Abandonment: ☐ Dry ☒ Production for Sub-economic ☐ Mechanical Problems

☐ Other

Casing to be pulled: ☒ Yes ☐ No Estimated Depth: 900

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
J SAND	7526	7580			

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	519	435	519	0	VISU
1ST	7+7/8	4+1/2	11.6	7,825	180	7,825	6,600	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7450 with 2 sacks cmt on top. CIPB #2: Depth 80 with 25 sacks cmt on top.

CIBP #3: Depth _____ with _____ 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 _____ 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: ☐

Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged: ☐

Perforate and squeeze at 6580 ft. with 50 sacks. Leave at least 100 ft. in casing 6430 CICR Depth

Perforate and squeeze at 4300 ft. with 230 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 220 sacks half in. half out surface casing from 1000 ft. to 410 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:

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 suicide: 50 sx (86 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. Cement volume based on 180' in 4 ½" casing and 180' in an 8" OH with 20% excess. Caliper on file.
6.2 Sussex suicide: 230 sx (265 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 500' in 4 ½" casing and 500' in a 9" OH with 20% excess. Caliper on file.
6.3 Foxhills plug: 220 sx (293 cu-ft) Type III w/ cello flake and CaCl2 as necessary, mixed at 14.8 ppg and 1.33 cu-ft/sk. Cement volume based on 100' in 4 ½" casing, 381' in a 9" OH with 20% excess, and 209' in 8 5/8" casing. Caliper on file.
7. TOOH 2 3/8" tubing landed at 7507'. Stand back 2 3/8" tubing.
8. MIRU WL. RIH gauge ring for 4 ½" 11.6# casing to 7500'. POOH.
9. PU 4 ½" 11.6# CIBP and RIH w/WL. Set at +/- 7450' to abandon J Sand perfs. PT to 1000 psi for 15 minutes. PU dump bailer, dump bail 2 sx class "G" cement on CIBP. POOH.
10. 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 6580' and 6400'. POOH, RD WL.
11. 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.
12. RU cementers, pump Niobrara suicide: 50 sx (86 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 6580' to 6400'. Under displace and sting out of CICR to leave 3 bbls (~200') of cement on top of retainer. Cement volume based on 8" OH with 20% excess. Caliper readings across entire interval. RDMO cementers.
13. PUH to +/- 6000'. Reverse circulate with biocide treated water to displace cement and clear tubing.
14. POOH. Stand back 3830' of tubing.
15. 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 4300' and 3800'. RD WL.
16. PU and RIH w/CICR and 2 3/8" tubing, set CICR at +/- 3830'. Establish circulation with rig pump using biocide treated water.
17. 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.
18. Pump Sussex suicide: 230 sx (265 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 4300' to 3800'. Under displace and sting out of CICR to leave 3 bbls (~200') on top of retainer. Cement volume based on 9" OH with 20% excess. Caliper readings across entire interval. RD cementers.
19. PUH to +/- 3400'. Reverse circulate with biocide treated water to displace cement and clear tubing.
20. P&SB 1000', LD remainder.
21. RU WL. Shoot off 4 ½" casing at or below 900'. RD WL. Circulate casing with biocide treated water to remove any gas.
22. NDBOP, NDTH.
23. Install BOP on casing head with 4 ½" pipe rams.
24. TOOH 4 ½" casing, LD.
25. RIH with 2 3/8" tubing to 1000' inside 4 ½" casing.
26. 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: 220 sx (293 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 1000'-900' in 4 ½" casing, 900'-519' in 9" OH with 20% excess, and 519'-310' in 8 5/8" casing. Caliper readings across entire interval. RD cementers.
27. PUH to 100' and circulate with water and biocide to displace cement and clear tubing.
28. WOC per cement company recommendation. Tag cement at or above 410'. If not, consult with Evans Engineering.
29. RU WL. RIH 8 5/8" 24# CIBP to 80'

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: 3/12/2015 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 1000' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 469' 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
400808362	FORM 6 INTENT SUBMITTED
400808364	PROPOSED PLUGGING PROCEDURE
400808365	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
Permit	Well Completion Report dated 05/03/2004.	3/13/2015 11:10:16 AM

Total: 1 comment(s)