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: 400886943

Date Received: 08/19/2015

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 05-123-15650-00

Well Name: FORT SAINT VRAIN Well Number: 20

Location: QtrQtr: NWSE 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: 40.238400 Longitude: -104.893380

GPS Data:

Date of Measurement: 05/25/2006 PDOP Reading: 2.8 GPS Instrument Operator's Name: Steve Fisher

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

☐ Other

Casing to be pulled: ☒ Yes ☐ No Estimated Depth: 840

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	7098	7118			
NIOBRARA	6838	6982			

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	514	275	514	0	VISU
1ST	7+7/8	4+1/2	11.6	7,220	175	7,220	6,319	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6770 with 25 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 25 sks cmt from 6770 ft. to 6370 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 4120 ft. with 230 sacks. Leave at least 100 ft. in casing 3740 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 250 sacks half in. half out surface casing from 940 ft. to 400 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. ND WH. NU BOP. Unseat landing jt, LD.
6 TOOH and SB 2 3/8'' production tubing (225 jts landed @ 7054').
7 PU casing scraper for 4 1/2'', 11.6 #/ft csg and RIH to 6800'. POOH and LD scraper.
8 MIRU WL. Set 4 1/2'' CIBP at 6770' (collars at 6747' and 6790') to abandon Niobrara/Codell perfs. RD WL.
9 MIRU hydrotester. Hydrotest 2 3/8'' tbg to 3000 psi down to 6770'. RD hydrotester.
10 Tag CIBP and PU 5'. Circulate all gas out of the hole. Pressure test the CIBP to 1000 psi.
11 RU Cementers. Pump Niobrara/Codell balanced plug: 25 sx (35 cuft) Thermal 35 + 0.5% CHR-2 + 0.25% FMC blend mixed at 15.6 ppg and 1.51 cuft/sx (400' inside 4 1/2'' csg, no excess). The plug will cover 6770' - 6370'. RD cementers.
12 PUH to 6200' and circulate tubing clean to ensure no cement is left in the tubing.
13 P&SB 3740' of tubing, LD remainder.
14 MIRU WL. PU and RIH with 3' of 3 1/8'' perf guns and shoot 1' squeeze holes at 4120' and 2' of squeeze holes at 3710' with 3 spf, 0.59''diam, 120 degree phasing (total of 9 shots). RDMO WL.
15 PU and RIH with a 4 1/2'' CICR on 2 3/8'' tubing and set at 3740'. Establish circulation with fresh water treated with biocide.
16 MIRU Cementers. Pump 20 bbls sodium metasilicate and a 5 bbl water spacer followed by Sussex Suicide Squeeze: 230 sx (264.5 cuft) Class ''G'' cement with 0.25 pps cello flake, 0.5% CFR- 2 + 0.2% FMC + 0.5% LWA, mixed at 15.8 ppg and 1.15 cuft/sx (410' in 10'' OH from caliper with 20% excess, 510' in 4 1/2'' production casing with no excess). Underdisplace by 3 bbls and unsting from CICR spotting at least 100' of cement over squeeze perfs. The plug will cover 4120' - 3610'. RDMO cementers.
17 PUH to 3400' and circulate tubing clean to ensure no cement is in the tubing. P&SB 940' of tubing, LD remainder. Monitor BH pressure and if still an issue, contact engineering.
18 MIRU WL. RIH and jet cut casing at 840'. RDMO WL.
19 Circulate with fresh water containing biocide to remove any gas.
20 NDBOP, NDTH. Install BOP on casing head with 4 1/2'' pipe rams.
21 TOOH with 840' of 4 1/2'' casing, LD. Replace 4 1/2'' pipe rams with 2 3/8'' pipe rams.
22 RIH with 940' of 2 3/8'' tubing (100' into casing stub at 840').
23 MIRU Cementers. Establish circulation and get bottoms up. Pump 10 bbl fresh water containing biocide, 10 bbl (min) SAPP followed by a 20 bbl fresh water spacer. Pump Stub Plug: 250 sx (332.5 cuft) Type III w/ cello flake and CaCl2 as deemed necessary w/ 0.3% CFL-3 + 0.3% CFR-2, mixed at 14.8 ppg and 1.33 cuft/sx (100' in 4 1/2'' casing with no excess, 326' in 10'' OH from caliper with 40% excess, 214' in 8 5/8'' surface csg with no excess). The plug will cover 940' - 300'. RD cementers.
24 Pull up to 100' and circulate tubing clean using fresh water treated with biocide. TOOH.
25 WOC per cement company recommendation. Tag cement. Cement top needs to be above 414'.
26 MIRU WL. RIH 8 5/8'' CIBP to 80'. Set and pressure test to 1000 psi for 15 minutes. RDMO WL and WO rig.
27 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.
28 Supervisor submit paper copies of all invoices, logs, and reports to Evans Engineering Specialist.
29 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
30 Excavate hole around surface casing enough to allow welder to cut casing minimum 5' below ground level.
31 Welder cut casing minimum 5' below ground level.
32 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).
33 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
34 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
35 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.
36 Back fill hole with fill. Clean l

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: 8/19/2015 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: 9/24/2015

CONDITIONS OF APPROVAL, IF ANY: Expiration Date: 3/23/2016

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 940' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 464’ 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
400886943	FORM 6 INTENT SUBMITTED
400886948	PROPOSED PLUGGING PROCEDURE
400886949	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
Permit	Well Completion Report dated 7/21/1992 & Sundry 2/17/2010	9/2/2015 9:49:31 AM
Public Room	DOCUMENT VERIFICATION COMPLETE 8/20/15	8/20/2015 3:04:27 PM

Total: 2 comment(s)