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: 400890974

Date Received: 08/27/2015

## 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 05-123-19105-00

Well Name: HSR-HOUSTON B Well Number: 5-16A

Location: QtrQtr: SWNW Section: 16 Township: 3N Range: 67W Meridian: 6

County: WELD Federal, Indian or State Lease Number: 72-2162-S

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: 40.228260 Longitude: -104.903090

GPS Data:

Date of Measurement: 11/10/2006 PDOP Reading: 2.1 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: 850

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 | 7078 | 7088 | | | |
| J SAND | 7519 | 7558 | | | |
| NIOBRARA | 6886 | 6888 | | | |

Total: 3 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 | 728 | 580 | 728 | 0 | VISU |
| 1ST | 7+7/8 | 3+1/2 | 7.7 | 7,225 | 310 | 7,223 | 6,336 | CBL |
| S.C. 1.1 | 7+7/8 | 3+1/2 | 7.7 | 7,225 | 140 | 4,812 | 3,506 | CBL |
| 1ST LINER | 2+7/8 | 2+3/8 | 4.7 | 7,680 | 15 | 7,680 | 7,162 | CBL |

## Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7150 with 1 sacks cmt on top. CIPB #2: Depth 6830 with 15 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 15 sks cmt from 6830 ft. to 6390 ft. Plug Type: CASING Plug Tagged: ☐

Set 45 sks cmt from 4630 ft. to 3630 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 _____ 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

Perforate and squeeze at _____ ft. with _____ sacks. Leave at least 100 ft. in casing _____ CICR Depth

(Cast Iron Cement Retainer Depth)

Set 110 sacks half in. half out surface casing from 850 ft. to 628 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 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP.
5 Unland 2 1/16" tbg (220 jts) landed at 7129'. TOOH, SB all tubing.
6 MIRU WL. RIH with 3 1/2" 7.7 #/ft junk basket and gauge ring to 7155'. POOH.
7 Set CIBP at 7150' to abandon J-sand perfs (collars at 7118' and liner top @ 7162'). Dump bail 1 sx cmt on CIBP.
8 Set CIBP at 6830' (collars @ 6814' & 6858'). RD WL.
9 RU hydrotester. RIH with 2 1/16" tubing to 6830' while hydrotesting to 3000 psi. Tag CIBP and pick up 5'. Circulate gas out of the hole and pressure test the CIBP and production casing to 3000 psi for 15 minutes. If pressure test passes, proceed to the next step; but if it fails, contact engineering for revised procedure steps to hydrotest 3 1/2" casing back in hole to spot stub plug prior to step 18.
10 RU Cementers. Pump Niobrara Balanced Plug: 15 sx (22.7 cuft) Thermal 35 + 0.5% CHR-2 + 0.25% FMC blend mixed at 15.6 ppg and 1.51 cuft/sx (440' inside 3 1/2" casing, no excess). The plug will cover 6830' - 6390'. RD cementers.
11 PUH to 6200', circulate tubing clean to ensure no cement is in tubing.
12 P & SB 4730' of tubing, LD remainder.
13 RU Cementers. Pump Sussex Balanced Plug: 45 sx (51.8 cuft) Class "G" cement with 0.5% CFR-2 + 0.2% FMC + 0.5% LWA, mixed at 15.8 ppg and 1.15 cuft/sx (1000' in 3 1/2" production casing with no excess). The plug will cover 4630' - 3630'. RD cementers.
14 PUH to 3400' and circulate tubing clean to ensure no cement is in tubing.
15 WOC per cement company recommendation. Tag cement. Cement top needs to be above 3760'. POOH and LD 2 1/16" tubing.
16 RU WL. Cut casing at 850'. RDMO WL.
17 Circulate with fresh water containing biocide to remove any gas.
18 NDBOP, NDTH. Install BOP on casing head with 3 1/2" pipe rams. If casing PT to 3000 psi passed in step 9, proceed; otherwise, TOOH and hydrotest back in the hole.
19 MIRU Cementers. Establish circulation and get bottoms up. Pump 10 bbl (min) SAPP followed by a 20 bbl fresh water spacer.Pump Stub Plug: 110 sx (146.3 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 (122' in 9" OH from caliper with 40% excess, 208' in 8 5/8" surface csg with no excess). The plug will cover 850' - 620'. RD cementers.
20 Pull up to 100' and circulate tubing clean using fresh water treated with biocide. TOOH.
21 WOC per cement company recommendation. Tag cement. Cement top needs to be above 628'.
22 MIRU WL. RIH 8 5/8" CIBP to 80'. Set and pressure test to 1000 psi for 15 minutes. RDMO WL and WO rig.
23 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.
24 Supervisor submit paper copies of all invoices, logs, and reports to Evans Engineering Specialist.
25 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
26 Excavate hole around surface casing enough to allow welder to cut casing minimum 5' below ground level.
27 Welder cut casing minimum 5' below ground level.
28 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).
29 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
30 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
31 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.
32 Back fill hole with fill. Clean location, level.
33 Submit Form 6 to COGCC ensuring to provide 'As performed' WBD identifying operations completed.

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: 8/27/2015 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: 10/5/2015

**CONDITIONS OF APPROVAL, IF ANY:** Expiration Date: 4/4/2016

| COA Type | Description |
|---|---|
| | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.<br>2) If unable to pull casing contact COGCC for plugging modifications.<br>3) For 850' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 678' or shallower.<br>4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.<br>5) Please submit existing gyro survey data with Form 6 (s) Subsequent Report of Abandonment. |

# Attachment Check List

| Att Doc Num | Name |
|---|---|
| 400890974 | FORM 6 INTENT SUBMITTED |
| 400891009 | PROPOSED PLUGGING PROCEDURE |
| 400902511 | WELLBORE DIAGRAM |

Total Attach: 3 Files

## General Comments

| User Group | Comment | Comment Date |
|---|---|---|
| Permit | Corrected Wellbore diagram attached. Permitting Review Complete. | 9/23/2015 10:21:55 AM |
| Permit | Returned to draft: Wellbore diagram is for different well. | 9/16/2015 1:29:38 PM |
| Permit | Well Completion Report dated 06/06/1996 & 2/5/2003. | 8/31/2015 9:32:47 AM |
| Public Room | Document Verification Complete 8/28/15 | 8/28/2015 10:18:34 AM |

Total: 4 comment(s)