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: 400684529

Date Received: 09/10/2014

## 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 05-123-20964-00

Well Name: BRATTAIN L Well Number: 12-16JI

Location: QtrQtr: SESE Section: 12 Township: 3N Range: 66W 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: 40.233890 Longitude: -104.717990

GPS Data:

Date of Measurement: 06/21/2006 PDOP Reading: 2.8 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: 950

Fish in Hole: ☐ Yes ☒ No If yes, explain details below

Wellbore has Uncemented Casing leaks: ☐ Yes ☒ No If yes, explain details below

Details: During operations to change out the wellhead and add Sussex and Fox Hills remedial cemnt, holes in the casing were discovered from 991' - 1023'. A decision was made to secure the well with a CIBP and 2 sx over the JSand at 7930' plus an RBP at 7080' with 2 sx sand, then come back and plug and abandon the well.

## Current and Previously Abandoned Zones

| Formation | Perf. Top | Perf. Btm | Abandoned Date | Method of Isolation | Plug Depth |
|---|---|---|---|---|---|
| J SAND | 7906 | 7974 | 07/08/2014 | B PLUG CEMENT TOP | 7930 |

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 | 710 | 490 | 710 | 0 | VISU |
| 1ST | 7+7/8 | 4+1/2 | 11.6 | 8,092 | 315 | 8,092 | 6,621 | CBL |

# Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 80 with 25 sacks cmt on top. CIPB #2: Depth _____ with _____ 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 80 sks cmt from 7920 ft. to 6750 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 4760 ft. with 250 sacks. Leave at least 100 ft. in casing 4240 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 220 sacks half in. half out surface casing from 1250 ft. to 500 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:

1 Provide 48 hr notice to COGCC prior to rig up per request on approved Form 6 (e.g. call field coordinator, submit Form 42, etc.). Call IOC (970-506-5980) at least 24 hr prior to rig move. Request they isolate production equipment and remove any automation prior to rig MIRU.
2 Prepare location for base beam equipped rig. Install perimeter fence as needed.
3 Check and record Bradenhead pressure. If Bradenhead valve is not accessible, re-plumb so that valve is above GL.
4 MIRU workover rig. Circulate well with water w/ biocide to kill the well if needed. ND wellhead. NU BOPs. Unseat landing jt. Spot trailer with 29 jts of 2-3/8" tbg. (NOTE: casing leak was found during Bradenhead activity between 991' and 1023')
5 MIRU Slickline. Set plug in XN nipple at 7013'. PT tbg to 3000 psi. Pull plug and RDMO Slickline.
6 PU 2 jts of 2-3/8" tbg and RIH to RBP at 7180'. Circulate the 2 sack sand cap off RBP. Latch and release RBP.
7 POOH and stand back 2-3/8" tbg. Lay down RBP, retrieving head and XN profile.
8 Notify Cementers to be on call.
9 RIH on 2-3/8" tbg. Tag CIBP w/ cement cap at 7930'. Pick up 5 feet.
10 RU Cementers. Pump Niobrara plug consisting of 110 cu-ft (80 sx)"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 cuft/sk. Calculated top in the 4-1/2" csg is 6750'. RD Cementers.
11 PUH to 6400' and circulate hole clean with fresh water w/ biocide. POOH standing back 134 jts and laying down the remainder.
12 MIRU WL. PU and RIH with 1- 1' 3-1/8" perf guns with 3 spf, 0.5" diam, 120° phasing. Shoot 1' of squeeze holes at 4760'. RDMO WL. Note: We plan to circulate the suicide plug through the csg holes at ~1000'.
13 PU retrievable packer and RIH to 1200'. Set packer and establish circulation through bottom sqz holes at 4760' and csg holes at ~1000'. POOH and LD packer.
14 PU 4-1/2" CICR and RIH on 2-3/8" tbg and set at 4240'.
15 RU Cementers. Establish circulation through sqz holes at 4760' and casing leak holes at ~1000'. Pump 5 bbls fresh water followed by 20 bbls Sodium Metasilicate followed by 5 bbls fresh water spacer. Pump Sussex Suicide plug: 288 cu-ft (250 sks) "G" w/ 0.25pps cello flake, 0.4% CD-32, 0.4% ASA-301 with CaCl2 as necessary. Underdisplace by 3 bbls and sting out of CICR. Spot final 3 bbls on top of CICR. Mixed at 15.8 ppg, 1.15 cuft/sack. Volume is based on 9" hole plus 20% excess and 4-1/2" csg up to 4060'. RD Cementers
16 PUH to ~3800' and circulate hole clean with fresh water w/ biocide. POOH standing back 34 jts 2-3/8" tbg. Lay down stinger and remaining jts.
17 ND BOP and wellhead. Install a BOP on surface casing head with 4 1/2" pipe rams. Install 3000 psi ball valves on both casing head outlets. Install a choke or choke manifold on one outlet.
18 MIRU Wireline. Cut off 4-1/2" csg at 1150' per CCL. RDMO WL. Circulate bottoms up using water and biocide to remove any gas from wellbore. (Do not reverse circulate)
19 POOH and LD 4-1/2" csg. Remove the 4-1/2" pipe rams and Install 2-3/8" pipe rams.
20 MIRU Cementers. Fox Hills Suicide Squeeze: Pump mud flush of 10 bbls SAPP and 20 bbl water ahead of 293 cu-ft (220 sx) Type III w/cello flake and CaCl2 as deemed necessary, mixed at 1.33 cf per sack, 14.8 ppg. Plug size is based on 9" hole with 40% excess covering 1200' to surface csg shoe at 710' and capacity in the 8-5/8" csg to 500'. RD Cementers.
21 PUH to 300' and circulate hole clean. POOH and LD tbg. WOC at least 4 hours per cementing company recommendation.
22 RU WL. RIH and tag top of plug. Plug needs to be tagged at 500' or shallower. Contact Reed Boeger in Evans after tag to confirm.
23 RIH and set CIBP in the 8 5/8", 24# surface casing at 80'. PT CIBP and surface casing to 1000 psi for 15 minutes. Assuming successful test, RDMO wireline. RDMO WO Rig.
24 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.

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: 9/10/2014 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: 9/18/2014

**CONDITIONS OF APPROVAL, IF ANY:** Expiration Date: 3/17/2015

| COA Type | Description |
|---|---|
| | 1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.<br>2) Please tag existing CIBP w/2 sxs @ 7930'. If satisfactory wireline reports confirming setting of CIBP w/ 2sxs @ 7930' emailed to COGCC prior to plugging operations beginning no need to tag.<br>3) If unable to pull casing contact COGCC for plugging modifications.<br>4) For 1250' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 660' or shallower.<br>5) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.<br>6) Please submit gyro survey data with Form 6 (s) Subsequent Report of Abandonment. |

## Attachment Check List

| Att Doc Num | Name |
|---|---|
| 400684529 | FORM 6 INTENT SUBMITTED |
| 400684532 | PROPOSED PLUGGING PROCEDURE |
| 400684533 | WELLBORE DIAGRAM |

Total Attach: 3 Files

## General Comments

| User Group | Comment | Comment Date |
|---|---|---|
| Permit | Well Completion Report dated 10/07/2002. | 9/11/2014 8:52:09 AM |

Total: 1 comment(s)