

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
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Date Received:
01/10/2014

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, Name: JOHNSON, RANDELL Tel: (303) 815-9641
COGCC contact: Email: randell.johnson@state.co.us

API Number 05-123-07799-00 Well Number: 1
Well Name: ANTONE C. HEIT UNIT
Location: QtrQtr: SWSW Section: 22 Township: 1N 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: 40.032780 Longitude: -104.882230
GPS Data:
Date of Measurement: 09/21/2006 PDOP Reading: 2.3 GPS Instrument Operator's Name: Steve Fisher
Reason for Abandonment: Dry Production for Sub-economic Mechanical Problems
 Other Wellbore is too close to new horizontal lateral
Casing to be pulled: Yes No Estimated Depth:
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 | 7672 | 7692 | | | |
| J SAND | 8094 | 8112 | | | |

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 | 23 | 218 | 200 | 218 | 0 | VISU |
| 1ST | 7+7/8 | 4+1/2 | 11.6 | 8,230 | 200 | 8,230 | 7,570 | CBL |
| S.C. 1.1 | | | | 6,950 | 150 | 7,560 | 6,950 | CBL |
| S.C. 1.2 | | | | 825 | 300 | 850 | 654 | CBL |
| | 7+7/8 | 4+1/2 | Stage Tool | 654 | 200 | 654 | 0 | CBL |

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8040 with 2 sacks cmt on top. CIPB #2: Depth 7590 with 2 sacks cmt on top.
 CIBP #3: Depth 75 with 8 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 50 sks cmt from 7590 ft. to 6720 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 4450 ft. with 360 sacks. Leave at least 100 ft. in casing 4480 CICR Depth
 Perforate and squeeze at 900 ft. with 285 sacks. Leave at least 100 ft. in casing 930 CICR Depth
 Perforate and squeeze at _____ ft. with _____ sacks. Leave at least 100 ft. in casing _____ CICR Depth

(Cast Iron Cement Retainer Depth)

Set _____ sacks half in. half out surface casing from _____ ft. to _____ ft. Plug Tagged:
 Set 8 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:

Perforate and squeeze at 4450 ft. with 360 sacks Leave at least 100 ft. in casing 4480 CICR Depth
Perforate and squeeze at 1450, 900' ft. with 285 sacks Leave at least 100 ft. in casing 930 CICR Depth

Antone Heit C Unit 1

- 1 Call foreman or lead operator at least 24 hr prior to rig move. Request that they catch and remove the plunger, isolate production equipment and remove any automation prior to rig showing up. Install perimeter fence as needed.
- 2 GYRO complete 11/29/2012.
- 3 Provide notice of MIRU to COGCC field inspector as specified in approved form 6.
- 4 Notify IOC when rig mobilizes to location to generate workorder for flowline removal and one call for line locates.
- 5 Prepare location for base beam equipped rig
- 6 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt, LD.
- 7 Notify cementers to be on call. Provide volumes (50 sx Poz:G:Gel + 20% Silica flour + 0.4% CFL + 0.1% SMS + 0.05% CR-4, 13.5 ppg 1.66 cuft/sk (In pipe only), 360 sx Poz:III:Gel + 3%(BWOW)KCL + 1% SMS + 0.4% CR-4 + 0.2% SPC-2 + 2lb/sk PS Flake, 12.5 ppg, 1.93 cuft/sk, 285 sx Type III + 0.2% SPC-2 + 2 lb/sk PS Flake, 14.2 ppg, 1.46 cuft/sk yield.
- 8 TOOH 2 3/8" production tubing. Stand back 7600', LD remainder.
- 9 MIRU WL. RIH gauge ring for 4.5" 11.6#/ft csg to 8050' (note there are mix casing weights in this well)
- 10 RIH CIBP, set at 8040' (This should be 11.6# pipe, no CBL for collars). PU dump bailer, dump bail 2 sx class G cement on CIBP.
- 11 RIH with 2nd CIBP, set at 7590' (This should be 11.6# pipe, collar at 7600'). Pressure test to 1000 psi (squeeze perms held in 1996 at 1000 psi)
- 12 TIH to 7590'+/- hydrotesting tubing to 3000 psi. Circulate gas from wellbore using water containing biocide.
- 12 RU cement services.
- 13 Spot 50 sx Poz:G:Gel + 20% Silica flour + 0.4% CFL + 0.1% SMS + 0.05% CR-4, 13.5 ppg 1.66 cuft/sk for 4:20 pump time, from 7590' to 6850' to ensure coverage of 400' above Niobrara/Codell and of squeeze hole at 6950'.
- 14 PUH 22 stands. Circulate with 9.0 ppg mud containing biocide to clear tbg. TOOH with tubing, SB 5350', LD remainder. MO cementers.
- 15 MIRU wireline. PU two 1' 3-1/8" perf guns loaded with 3 spf, 0.5" EHD, 120 phasing. Shoot 1' of squeeze holes at 5310' and 4450'. RD wireline
- 16 PU 4-1/2" CICR and RIH on 2 3/8" production tubing to 4480'. Set CICR.
- 17 Initiate circulation through CICR using water containing biocide. Note rate and pressure.
- 18 MIRU cementing services. Pump 360 sx Poz:III:Gel + 3%(BWOW)KCL + 1% SMS + 0.4% CR-4 + 0.2% SPC-2 + 2lb/sk PS Flake, 12.5 ppg, 1.93 cuft/sk, underdisplace by 3 bbls, release from CICR, PUH and displace remainder of cement on top of CICR.
- 19 PUH. Circulate (TBG Vol + Excess) to CLR TBG. RD cementing services
- 20 Load hole and circulate with 9.0 ppg mud containing biocide.
- 21 TIH and tag, if below 4450', contact production engineer to discuss.
- 22 P&SB 930+/-' tbg. LD remainder.
- 23 PU two 1' 3-1/8" perf guns loaded with 3 spf, 0.5" EHD, 120 phasing. Shoot 1' of squeeze holes at 1450' and 900'. RD wireline
- 25 PU 4-1/2" CICR and RIH on 2 3/8" production tubing to 930'. Set CICR.
- 26 Initiate circulation through CICR using water containing biocide. Note rate and pressure.
- 27 MIRU cementing services. Pump 285 sx Type III + 0.2% SPC-2 + 2 lb/sk PS Flake, 14.2 ppg, 1.46 cuft/sk yield, underdisplace by 13 bbls (hope to have cement to 118'), release from CICR, PUH and displace remainder of cement on top of CICR.
- 28 Circulate (TBG Vol + Excess) to CLR TBG. TOOH with tubing. RD cementing services
- 29 Load hole and circulate with 9.0 ppg mud containing biocide.
- 30 WOC 4 hrs.
- 31 TIH and tag. If cement is below 118', discuss with production engineer
- 32 Fill casing with 9.0 ppg drilling mud containing biocide from TOC to 100'.
- 37 RU Wireline services. RIH 4-1/2" CIBP to 75' (11.6# pipe). Set, PT to 1000psi for 15 min. If tests, RDMO WL and WO rig.

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: 1/10/2014 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: 1/27/2014

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 7/26/2014

COA Type

Description

- 1) Provide 48 hour notice of plugging MIRU via electronic Form 42.
- 2) For 900' plug: pump plug and displace, wait 4 hours and tag plug – must be 160' or shallower.
- 3) Leave at least 100' cement in the casing for each plug.
- 3) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-----------------------------|
| 400537832 | FORM 6 INTENT SUBMITTED |
| 400537845 | PROPOSED PLUGGING PROCEDURE |
| 400537846 | WELLBORE DIAGRAM |
| 400537849 | WELLBORE DIAGRAM |

Total Attach: 4 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|--|--------------------------|
| Permit | Well Completion report dated 09/09/1973. | 1/13/2014 11:30:42 AM |

Total: 1 comment(s)