

FORM
6Rev
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:

400740715

Date Received:

11/25/2014

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: Carlile, Craig

Tel: (970) 629-8279

COGCC contact:

Email: craig.carlile@state.co.us

API Number 05-123-16928-00

Well Name: HSR-WARREN

Well Number: 12-35

Location: QtrQtr: NWSW Section: 35 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: 40.179860

Longitude: -104.751550

GPS Data:

Date of Measurement: 07/31/2008

PDOP Reading: 2.5

GPS Instrument Operator's Name: Cody Mattson

Reason for Abandonment: ☐ Dry☒ Production for Sub-economic☐ Mechanical Problems☐ OtherCasing to be pulled: ☒ Yes☐ No

Estimated Depth: 1370

Fish in Hole: ☒ Yes☐ No

If yes, explain details below

Wellbore has Uncemented Casing leaks: ☐ Yes☒ No

If yes, explain details below

Details: This well was deepened to the J sand w/2 7/8" liner in 2002.

There is a 2.375"X 1.66" tubing fish stuck in the well from 7120' to 7826' below a CIBP and 30 sack cement pug.

Current and Previously Abandoned Zones

| Formation | Perf. Top | Perf. Btm | Abandoned Date | Method of Isolation | Plug Depth |
|-----------|-----------|-----------|----------------|---------------------|------------|
| CODELL | 7426 | 7441 | 12/11/2013 | B PLUG CEMENT TOP | 7110 |
| J SAND | 7887 | 7937 | 12/11/2013 | B PLUG CEMENT TOP | 7110 |
| NIOBRARA | 7153 | 7282 | 12/11/2013 | B PLUG CEMENT TOP | 7110 |

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 | 755 | 530 | 755 | 0 | VISU |
| 1ST | 7+7/8 | 4+1/2 | 11.6 | 7,572 | 200 | 7,572 | 6,296 | CBL |
| 1ST LINER | 3+7/8 | 2+7/8 | 6.5 | 8,030 | 21 | 8,030 | 7,494 | CBL |

Plugging Procedure for Intent and Subsequent Report

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

CIBP #3: Depth _____ with _____ sacks cmt on top. CIBP #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 4660 ft. with 260 sacks. Leave at least 100 ft. in casing 4280 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 340 sacks half in. half out surface casing from 1470 ft. to 550 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:

Perforate and squeeze at 4660 / 4250 ft. with 260 sacks Leave at least 100 ft. in casing 4280' CICR Depth

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 Automation Removal Group at least 24 hr prior to rig move. Request they isolate production equipment and remove any automation prior to rig MIRU.

2 Check and report surface casing pressure. If surface casing is not accessible at ground level, re-plumb so valve is at ground level.

3 Prepare location for base beam equipped rig. Install perimeter fence as needed.

4 MIRU, check and bleed off any pressure on casing (all perfs are below a bridge plug). ND WH. NU BOP.

5 PU 2 3/8" tbg to tag cement plug @ 6565'. 197 jts reported in well landed @ 6467'. Tally out and stand back 4280' tbg.

6 RUWL. PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 4660' and 4250'. RDWL.

7 PU CICR on 2 3/8" tbg. RIH, hydro-testing to 3000 psi, and set CICR at 4280'.

8 RU Cementers. Pump 5 bbl water w/ biocide, 20 bbl Sodium Metasilicate, and another 5 bbl spacer immediately preceding cement.

9 Pump Sussex Suicide: 260 sx class "G", w/0.25 pps cello flake, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cuft/sk (299 cuft of slurry) to place cement between perfs. Underdisplace and sting out of CICR to leave 3 bbls cement on top of retainer. Cement volume based on 10.5" hole with 20% excess. Caliper log on file.

10 POH 10 stands. Circulate water containing biocide to clear tubing. POH standing back 1470' of tbg.

11 RU WL. Crack coupling or cut casing at 1370'. RDMO WL. Circulate bottoms up and continue circulating to remove any gas from wellbore.

12 ND BOP and wellhead. Install 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.

13 TOOH and LD 4 1/2" casing.

14 RIH with 2 3/8" tubing open-ended to 1470' (100' inside 4 1/2" stub).

15 RU cementers. Pump 10 bbl SAPP (Sodium Acid Pyrophosphate) followed by 20 bbl (min.) fresh water spacer immediately preceding cement.

16 Pump balanced Stub Plug: 340 sx Type III w/0 .25#/sk cello flake and CaCl2 as deemed necessary mixed at 14.8 ppg and 1.33 cf/sx (452 cuft of slurry). Cement volume based on 100' in 4 1/2" csg, 205' in 8 5/8" csg, and 615' in 9 1/2" OH + 20% excess. Caliper log on file.

17 TOOH. WOC per cementing company recommendation. Tag Cement. TOC should be at or above 705'. If not, consult Evans Engineering.

18 MIRU WL. RIH 8 5/8" CIBP to 80'. Set and PT to 1000 psi for 15 min. If tests, RDMO WL and WO rig.

19 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.

20 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.

21 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.

22 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.

23 Welder cut 8 5/8" casing minimum 5' below ground level.

24 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).

25 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.

26 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.

27 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.

28 Back fill hole with fill. Clean location, level.

29 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: 11/25/2014 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: 5/15/2015

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 11/14/2015

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 1470' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 705' 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. 6) Please submit contractor reports on setting of CIBP w/ 30 sxs @ 7110' with Form 6 (s) Subsequent Report of Abandonment. |
|--|---|

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|-----------------------------|
| 400740715 | FORM 6 INTENT SUBMITTED |
| 400740721 | PROPOSED PLUGGING PROCEDURE |
| 400740722 | WELLBORE DIAGRAM |

Total Attach: 3 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|---|--------------------------|
| Permit | Well Completion Reports dated 9/13/1993 & 2/5/2003. | 12/11/2014 9:35:26 AM |

Total: 1 comment(s)