

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:

400689415

Date Received:

09/16/2014

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 05-123-18846-00

Well Name: HSR-RADEMACHER

Well Number: 12-30

Location: QtrQtr: NWSW Section: 30 Township: 3N Range: 67W Meridian: 6

County: WELD

Federal, Indian or State Lease Number: 64618

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: 40.195530

Longitude: -104.938910

GPS Data:

Date of Measurement: 10/31/2006

PDOP Reading: 2.2

GPS Instrument Operator's Name: Chris Fisher

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

Estimated Depth: 940

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	7190	7210			
NIOBRARA	6985	6986			

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	742	520	742	0	VISU
1ST	7+7/8	3+1/2	7.7	7,336	445	7,336	6,430	CBL
S.C. 1.1				5,000	185	5,000	3,686	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6920 with 20 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 20 sks cmt from 6920 ft. to 6390 ft. Plug Type: CASING Plug Tagged: ☐
Set 50 sks cmt from 4950 ft. to 3830 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 180 sacks half in. half out surface casing from 940 ft. to 542 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 catch and remove plunger, isolate production equipment and remove any automation prior to rig MIRU.

2 MIRU slickline services. Pull bumper spring and tag bottom.

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

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

5 MIRU, kill well as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt.

6 TOOH and stand back 2.063" IJ tbg: 219 jts landed @ 7174'

7 MIRU Warrior WL. PU guage ring for 3 1/2" 7.7# csg . RIH to 6950'.

8 RIH 3 1/2" CIBP and set at 6920' to isolate Cd/Nb perms. PT Casing to 1000 psi for 15 minutes. RDWL.

9 TIH w/ 2 .063" tbg open-ended to CIBP at 6920'. Hydro-test tbg to 3000 psi.

10 RU cementers and equalize a balanced plug above CIBP from 6920' to 6390' as follows: 20 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. (28 cuft of slurry).

11 POH 10 stands and circulate tbg clean using fresh water treated with biocide. POH and LD WS to bring EOT to 4950'.

12 RU cementers and equalize a balanced plug from 4950' to 3830' as follows: 50 sx class "G", w/0.4% CD-32, 0.4% ASA-301, and CaCl2 as deemed appropriate mixed at 15.8 ppg and 1.15 cuft/sk (58 cuft of slurry).

13 POH to ~3000. Circulate water containing biocide to clear tubing. WOC per cementing company recommendation.

14 Tag cement @ 3830'. POH and stand back 940' of tbg.

15 ND BOP and wellhead. Install BOP on surface casing head with 3 1/2" pipe rams. Install 3000 psi ball valves on both casing head outlets. Install a choke or choke manifold on one outlet.

16 RU WL. Crack coupling or cut casing at 940'. RDMO WL. Circulate bottoms up and continue circulating to remove any gas from wellbore.

17 TOOH and LD 940' of 3 1/2" casing.

18 RIH with tubing open-ended to 940' (3 1/2" stub).

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

20 Pump balanced Stub Plug: 180 sx Type III w/0 .25#/sk cello flake and CaCl2 as deemed necessary mixed at 14.8 ppg and 1.33 cf/sx (239 cuft of slurry). Cement volume based on 200' in 8 5/8" csg, and 200' in 10" OH + 40% excess.

21 TOOH. WOC per cementing company recommendation. Tag Cement. TOC should be at or above 642'. If not, consult Evans Engineering.

22 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.

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 Joleen Kramer.

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 8 5/8" casing minimum 5' below ground level.

27 Welder cut 8 5/8" 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: 9/16/2014 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: 10/2/2014

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 4/1/2015

COA Type	Description

Attachment Check List

Att Doc Num	Name
400689415	FORM 6 INTENT SUBMITTED
400689416	PROPOSED PLUGGING PROCEDURE
400689447	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	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 690' or shallower. 4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete. 5) Please submit gyro survey data with Form 6 (s) Subsequent Report of Abandonment.	10/2/2014 9:40:22 AM
Permit	Well Completion Report dated 4/3/1995.	9/19/2014 4:07:52 PM

Total: 2 comment(s)