

FORM
6Rev
12/05State 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:

400689411

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 05-123-17571-00

Well Name: HSR-RADEMACHER

Well Number: 11-30A

Location: QtrQtr: NESW Section: 30 Township: 3N 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: 40.195870

Longitude: -104.935690

GPS Data:

Date of Measurement: 06/20/2007

PDOP Reading: 2.4

GPS Instrument Operator's Name: Steve 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: This well was deepened to the J sand/Dakota w/2 7/8" liner in 2001. Dakota is behind pipe not completed.

Current and Previously Abandoned Zones

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
CODELL	7179	7190			
J SAND	7626	7652			
NIOBRARA	6926	7055			

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	616	430	616	0	VISU
1ST	7+7/8	4+1/2	11.6	7,327	200	7,327	6,120	CBL
1ST LINER	3+7/8	2+7/8	6.5	7,913	35	7,913	7,272	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7270 with 2 sacks cmt on top. CIBP #2: Depth 6850 with 25 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 25 sks cmt from 6850 ft. to 6450 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 4320 ft. with 270 sacks. Leave at least 100 ft. in casing 3930 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 250 sacks half in. half out surface casing from 1040 ft. to 416 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 4320'/3900' ft. with 270 sacks Leave at least 100 ft. in casing 3930' CICR Depth
 5 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt, LD.
 6 TOO and stand back 6850' 2 3/8" production tubing (232 jts landed @7264'). LD remaining 2 3/8" tbg and 10 jts 1.66" tbg (315').
 7 MIRU WL. RIH gauge ring for 4 1/2" 11.6# csg to Liner Top @ 7272'. RIH 4 1/2" CIBP and set at 7270' to abandon J sand perfs.
 PU dump bailer and spot 2 sx cement on CIBP.
 8 RIH 4 1/2" CIBP and set @ 6850' to abandon Cd/Nb perfs. Pressure test CIBP and casing to 1000 psi for 15 minutes. RDWL.
 9 TIH w 2 3/8" tbg open ended to CIBP at 6850'. Hydro -test tbg to 3000 psi.
 10 RU cementers and equalize a balanced plug above CIBP from 6850' to 6450' as follows: 25 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. (35 cuft of slurry).
 11 POH 20 stands and circulate tbg clean using fresh water treated with biocide. POH standing back 3930' of tbg.
 12 RUWL. PU 2 - 1' 3-1/8" perf guns with 3 spf, 0.5" dia 120° phasing. Shoot 1' of squeeze holes at 4320' and 3900'. RDWL.
 13 PU CICR on 2 3/8" tbg. RIH and set CICR at 3930'.
 14 RU Cementers. Pump 5 bbl water w/ biocide, 20 bbl Sodium Metasilicate, and another 5 bbl spacer immediately preceding cement.
 15 Pump Sussex Suicide: 270 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 (310 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" hole with 40% excess.
 16 POH 15 stands. Circulate water containing biocide to clear tubing. POH standing back ~1040' of tbg.
 17 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.
 18 RU WL. Crack coupling or cut casing at 940'. RDMO WL. Circulate bottoms up and continue circulating to remove any gas from wellbore.
 19 TOO and LD 940' of 4 1/2" casing.
 20 RIH with 2 3/8" tubing open-ended to 1040' (100' inside 4 1/2" stub).
 21 RU cementers. Pump 10 bbl SAPP (Sodium Acid Pyrophosphate) followed by 20 bbl (min.) fresh water spacer immediately preceding cement.
 22 Pump balanced Stub Plug: 250 sx Type III w/0 .25#/sk cello flake and CaCl₂ as deemed necessary mixed at 14.8 ppg and 1.33 cf/sx (333 cuft of slurry). Cement volume based on 100' in 4 1/2" csg, 200' in 8 5/8" csg, and 324' in 10" OH + 40% excess.
 23 TOO. WOC per cementing company recommendation. Tag Cement. TOC should be at or above 516'. If not, consult Evans Engineering.
 24 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.
 25 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.
 26 Supervisor submit paper copies of all invoices, logs, and reports to Joleen Kramer.
 27 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
 28 Excavate hole around surface casing enough to allow welder to cut 8 5/8" casing minimum 5' below ground level.
 29 Welder cut 8 5/8" casing minimum 5' below ground level.
 30 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).
 31 Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
 32 Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.
 33 Properly abandon flowlines per Rule 1103. File electronic Form 42 once abandonment complete.
 34 Back fill hole with fill. Clean location, level.
 35 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: 9/30/2014

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 3/29/2015

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 1040' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 566' 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.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400689411	FORM 6 INTENT SUBMITTED
400689412	PROPOSED PLUGGING PROCEDURE
400689413	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 2/10/1994, 9/28/2001.	9/19/2014 3:37:36 PM

Total: 1 comment(s)