

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:

400931350

Date Received:

11/05/2015

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: Montoya, John

Tel: (970) 397-4124

COGCC contact:

Email: john.montoya@state.co.us

API Number 05-123-10124-00

Well Name: EICHTHALER

Well Number: #2

Location: QtrQtr: NWNW Section: 34 Township: 2N Range: 65W 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: 40.099350

Longitude: -104.655396

GPS Data:

Date of Measurement: 07/20/2006

PDOP Reading: 2.5

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:

Fish in Hole: ☐ Yes☒ No

If yes, explain details below

Wellbore has Uncemented Casing leaks: ☐ Yes☒ No

If yes, explain details below

Details: 2011 squeeze: Squeeze holes shot at 1060' abd 810', pumped 120 sks and verified with CBL
2011 squeeze: Squeeze holes shot at 6840' and 6650', pumped 100 sks and verified with CBL
2012 squeeze: Squeeeae hole shot at 6615' and pumped 130 sks and verfiied with CBL

Current and Previously Abandoned Zones

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
CODELL	7262	7272			
DAKOTA	7841	7962			
J SAND	7710	7748			
NIOBRARA	7028	7112			

Total: 4 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	224	200	224	0	VISU
1ST	7+7/8	4+1/2	10.5/11.6	7,862	350	7,862	6,870	CBL
S.C. 1.1				6,842	100	6,842	6,170	CBL
S.C. 2.1				1,060	120	1,060	830	CBL
S.C. 3.1				1,650	200	1,700	1,600	CALC
1ST LINER	3+7/8	2+7/8	6.5	7,928	0	0	0	
OPEN HOLE	3+7/8			7,962				
			Stage Tool	720	150	720	224	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7800 with 2 sacks cmt on top. CIBP #2: Depth 7650 with 2 sacks cmt on top.

CIBP #3: Depth 6970 with 50 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 50 sks cmt from 6970 ft. to 6100 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 4500 ft. with 180 sacks. Leave at least 100 ft. in casing 4320 CICR Depth

Perforate and squeeze at 1430 ft. with 160 sacks. Leave at least 100 ft. in casing 1230 CICR Depth

Perforate and squeeze at _____ ft. with _____ sacks. Leave at least 100 ft. in casing _____ CICR Depth

(Cast Iron Cement Retainer Depth)

Set 80 sacks half in. half out surface casing from 1230 ft. to 11 ft. Plug Tagged: ☒

Set 10 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:

7 MIRU, kill as necessary using clean fresh water with biocide. ND WH. NU BOP. Unseat landing jt
8 POOH and stand back 2-3/8" tbg landed at 7776'.
9 RIH with scraper for 4-1/2" 10.5#/11.6 casing to 7800'. POOH and stand back 7000'.
10 MIRU wireline
11 PUH 4-1/2" CIBP, RIH and set at 7800'.
12 RIH with dump bailer and dump bail 2 sks of class G cement on CIBP set at 7800'. POOH
13 PU 4-1/2" CIBP RIH and set at +/- 7650'. POOH
14 RIH with dump bailer and dump bail 2 sks of class G cement on CIBP set at 7650'. POOH
15 PU 4-1/2" CIBP RIH and set at +/- 6970'. POOH
16 RIH with 2-3/8" tbg down to 2500' and circulate all the gas out of the hole in preparation to run CBL. POOH
17 Run CBL from 6970' to surface to confirm DV tool location, cement squeezes and free pipe up hole.
18 Send CBL to Evans engineering and discuss the results and if any modifications to the plugging procedure are needed.
19 Notify Cementers to be on call.
20 RIH with 2-3/8" tbg open ended while hydro testing to 3000 psi to CIBP at 6970'. Establish circulation.
21 MIRU cementers. Establish circulation. Pump Nio balanced plug: Pump 50 sks (76 cu-ft) of Cement Blend: Thermal 35 + 0.3% CFR-2 + 0.3% ASM-3 (AS-3). Mixed at 15.6 ppg and 1.51 cuft/sk yield. Volume based on 4-1/2" casing from 6970' to 6100'. RD Cementers.
22 PUH to 5800' and circulate hole clean with fresh water and biocide. POOH standing back 4320' of tubing.
23 MIRU WL. PU two 3-1/8" perf guns w/ 0.6" diam, 120 phasing and shoot 1' of squeeze holes at 4500' and 2' of squeeze holes at 4290'. RDMO WL.
24 PU 4-1/2" CICR on 2-3/8" tbg, RIH and Set CICR at 4320'. Establish circulation through sqz holes.
25 RU Cementers. Establish circulation. Pump Sussex Suicide plug: Pump 5 bbls fresh water followed by 20 bbls sodium metasilicate followed by 5 bbls fresh water ahead of cement: 180 sks (202 cu-ft) 1:1 'Poz:G + 0.6% CFL-2 + 0.5% CFR + 0.6% SMS + 0.2% SPC-2 + 0.1% LTR, mixed at 14.6 ppg and 1.12 cuft/sk. Underdisplace by 3 bbls and unsting from CICR. Spot final 3 bbls on top of CICR to leave 170' on top of CICR and sqz holes. Volume based on 10-1/2" x 4-1/2" annulus with 20% excess from 4500' to 4290', and 4-1/2" casing from 4500' to 4150'. RD Cementers.
26 PUH to 3700' and circulate hole clean with fresh water and biocide. POOH standing back 1230' of tubing
27 MIRU WL. PU two 3-1/8" perf guns w/ 0.6" diam, 120 phasing and shoot 1' of squeeze holes at 1430' and 2' of squeeze holes at 1100'. RDMO WL.
28 PU 4-1/2" tension set CICR on 2-3/8" tbg, RIH and Set CICR at 1230'. Establish circulation through sqz holes.
29 MIRU Cementers. Establish circulation and pump Fox Hills Squeeze: Pump mud flush of 10 bbls SAPP followed by 20 bbls water ahead of 240 sx (319 cu-ft) Type III + 0.3% CFL-3 + 0.3% CFR-2 + 1% CaCl2, mixed at 14.8 ppg and 1.33 cuft/sk. Underdisplace by 106 cuft and unsting from CICR. Spot and circulate final 106 cuft on top of CICR to bring cement to surface. POH and WOC per cementing company recommendation. Plug size is based on 4-1/2" casing from 1430' to surface and 10-1/2" hole with 20% excess covering 1430' to 1100'.
30 POOH and circulate clean
31 If cement was circulated to surface no need to tag. If cement was not circulated to surface wait per cement company recommendation and tag TOC. TOC needs to be at or shallower then 124'.
32 RDMO workover rig.
33 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.
34 Supervisor submit paper copies of all invoices, logs, and reports to Evans specialist.
35 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
36 Excavate hole around surface casing enough to allow welder to cut casing minimum 5' below ground level.
37 Welder cut casing minimum 5' below ground level.
38 Fill casing to surface using 4500 psi compressive strength cement, (NO gravel).
39 Spot weld on steel marker pla

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: 11/5/2015 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: 11/21/2015

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 5/20/2016

<u>COA Type</u>	<u>Description</u>
	<p>Note change in plugging procedure:</p> <p>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</p> <p>2) Run CBL to verify existing cement coverage. Note that 200 sxs were pumped due to a casing leak at 1650'.</p> <p>3) If CBL shows DV tool cement did not reach 174' or shallower perforate and add additional cement to annulus or pull casing and add additional cement for shoe plug.</p> <p>4) For 1230' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 174' or shallower.</p> <p>5) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.</p> <p>6) Please submit existing gyro survey data with Form 6 (s) Subsequent Report of Abandonment.</p>
	Production records need to be corrected prior to the approval of the Subsequent Report of Abandonment (Form 6). (duplicate reports for the Codell formation 04/201 thru 10/2011.)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400931350	FORM 6 INTENT SUBMITTED
400931364	PROPOSED PLUGGING PROCEDURE
400931365	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 4/22/1981, 4/2/1993, 7/10/1997 & 8/21/2012.	11/16/2015 1:08:48 PM
Public Room	Document verification complete 11/9/15	11/9/2015 9:26:06 AM

Total: 2 comment(s)