

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: 02/12/2015			

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: Carlile, Craig Tel: (970) 629-8279
COGCC contact: Email: craig.carlile@state.co.us

API Number 05-123-23988-00 Well Name: WARDELL Well Number: 20-45
 Location: QtrQtr: NESE Section: 20 Township: 3N 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: 40.207350 Longitude: -104.682380
 GPS Data:
 Date of Measurement: 09/20/2006 PDOP Reading: 3.5 GPS Instrument Operator's Name: DAVE GIPSON
 Reason for Abandonment: Dry Production for Sub-economic Mechanical Problems
 Other _____
 Casing to be pulled: Yes No Estimated Depth: 1280
 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	7232	7250			
NIOBRARA	7000	7017			

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	24	693	290	693	0	VISU
1ST	7+7/8	4+1/2	11.6	7,374	556	7,374	3,346	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 6940 with 25 sacks cmt on top. CIBP #2: Depth 80 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 6940 ft. to 6550 ft. Plug Type: CASING Plug Tagged:
Set 60 sks cmt from 4800 ft. to 4050 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 340 sacks half in. half out surface casing from 1380 ft. to 590 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:

5 MIRU WO rig. Kill well as necessary with water and biocide. ND wellhead. NU BOP.
 6 Unland 2.38" tbg (221 total joints landed at 7,225') and TOOH standing back 6,940' of 2.38" tubing. LD extra tubing.
 7 MIRU wireline. RIH with junk basket/gauge ring (4.5" 11.6#) to 6,990'. POOH. PU and RIH with CIBP (4.5", 11.6#) to set at 6,940' (collars at 6,906' and 6,949'). POOH. RDMO wireline.
 8 MIRU hydrotester. Hydrotest 2.38" tubing to 3,000 psi while TIH open ended. Tag CIBP set at 6,940'. PUH just above CIBP and circulate all gas out of the hole. Pumping water with biocide, pressure test the CIBP and production casing to 1,000 psi for 15 minutes. If pressure test passes, proceed to next step; otherwise contact engineering.
 9 MIRU cementing services. Establish circulation with water and pump 25 sx Class "G" cement with 20% silica flour, 0.4% CD-32 and 0.4% ASA-301 mixed at 15.8 ppg and 1.38 cuft/sx (cement volumes based on 4.5" 11.6# casing capacity from 6,940' to 6,550'). Displace cement to estimated TOC at 6,550' using approx. 25 bbls water. TOOH and LD 2.38" tubing so EOT at +/- 6,350'. Reverse circulate using approx. 49 bbls water (2 times tubing volume) or until returns are clean.
 10 TOOH and land EOT at 4,800'. LD extra tubing.
 11 MIRU cementing services. Establish circulation with water and pump 60 sx Class "G" cement with with 0.4% CD-32 and 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cuft/sx (cement volumes based on 4.5" 11.6# casing capacity from 4,800' to 4,050' with no excess). Displace cement to estimate TOC at 4,050' using 15.5 bbls water. TOOH and stand back 2.38" tubing so EOT at +/- 3,850'. Reverse circulate using approx. 30 bbls water (2 times tubing volume) or until returns are clean. RDMO cementing services. WOC to set up per cementing company recommendation.
 12 PU and TIH with 2.38" tubing to tag cement plug at +/- 4,050'. If cement is not above 4,050' contact engineer, otherwise proceed to next step.
 13 TOOH and stand back 1,380' of 2.38" tubing. LD extra tubing.
 14 RIH and jet cut 4.5" production casing at 1,280'. RDMO wireline. Circulate bottoms up and continue circulating to remove any gas from wellbore.
 15 ND BOP. Install BOP on surface casing head with 4.5" pipe rams. Install 3,000 psi ball valves on both casing head outlets. Install a choke or choke manifold on one outlet.
 16 TOOH and LD 1,280' of 4.5" casing.
 17 TIH with 2.38" tubing open ended to 1,380' (100' inside the 4.5" stub).
 18 MIRU cementing services. Establish circulation through 2.38" tubing with water and pump 10 bbls SAPP mud flush, 20 bbls fresh water spacer, then balanced stub plug using 340 sx Type III cement with cello flake and CaCl₂ as necessary, mixed at 14.8 ppg and 1.33 cuft/sx (cement volumes based on 100' inside 4.5" 11.6# casing, 587' in 9" hole with 40% excess, and 200' in 8-5/8" 24# surface casing). RDMO cementing services.
 19 TOOH and LD 2.38" tubing until end of tubing is at +/- 200'. Circulate down tubing and up surface casing/tubing annulus until returns are clean to ensure CIBP can be set in clean surface casing. Finish TOOH and LD 2.38" tubing. WOC to set up per cementing company recommendation.
 20 PU and TIH with 2.38" tubing to tag cement plug at +/- 590'. If cement is not above 590' contact engineer, otherwise proceed to next step.
 21 TOOH and LD all 2.38" tubing.
 22 MIRU wireline. PU and RIH with CIBP (8-5/8", 24#/ft). Set CIBP at 80' and pressure test the CIBP to 1,000 psi for 15 mins. If pressure test fails contact engineering, otherwise proceed to next step.
 23 RDMO wireline. RDMO WO rig.
 24 Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries to rscDJVendors@anadarko.com within 24 hours of completion of job.
 25 Supervisor submit paper copies of all invoices, logs, and reports to Evens Engineering Specialist.
 26 Excavation crew to notify One Call to clear excavation area around wellhead and for flowlines.
 27 Excavate hole around surface casing enough to allow welder to cut casing mi

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: 2/12/2015 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: 3/23/2015

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 9/22/2015

<u>COA Type</u>	<u>Description</u>
	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 1380' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 643' 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.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400790935	FORM 6 INTENT SUBMITTED
400791037	PROPOSED PLUGGING PROCEDURE
400791038	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 11/01/2006.	2/20/2015 9:51:45 AM

Total: 1 comment(s)