

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:

400815748

Date Received:

03/26/2015

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 05-123-33190-00

Well Name: FEHRN

Well Number: 1-32

Location: QtrQtr: SENE Section: 32 Township: 2N 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: 40.097335

Longitude: -104.795601

GPS Data:

Date of Measurement: 07/28/2011

PDOP Reading: 2.5

GPS Instrument Operator's Name: Renee Doiron

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

Estimated Depth: 890

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
DAKOTA	8270	8290			

Total: 1 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	944	590	944	0	VISU
1ST	7+7/8	4+1/2	11.6	8,467	90	8,467	7,954	CBL
			Stage Tool	7,954	675	7,954	892	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8180 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 <u>25</u> sks cmt from <u>8180</u> ft. to <u>7780</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input type="checkbox"/>
Set <u>25</u> sks cmt from <u>7350</u> ft. to <u>6950</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input checked="" type="checkbox"/>
Set <u>30</u> sks cmt from <u>4910</u> ft. to <u>4510</u> ft.	Plug Type: <u>CASING</u>	Plug Tagged: <input checked="" type="checkbox"/>
Set _____ sks cmt from _____ ft. to _____ ft.	Plug Type: _____	Plug Tagged: <input type="checkbox"/>
Set _____ sks cmt from _____ ft. to _____ ft.	Plug Type: _____	Plug Tagged: <input type="checkbox"/>

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 60 sacks half in. half out surface casing from 1560 ft. to 450 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 using clean fresh water with biocide. ND WH. NU BOP with 2-3/8" pipe rams. Unseat landing joint, and LD.
6. TOOH and SB 8180' 2-3/8" tubing.
7. RU WL. PU gauge ring and RIH to 8210' for 4-1/2" 11.6 lb/ft casing (spud date = 6/26/2011). POOH and LD gauge ring.
8. Set CIBP at 8180' (collars are located at 8162' and 8204') to abandon the Dakota perms. RD WL.
9. Fill hole and pressure test CIBP to 1000 psi for 15 minutes.
10. TIH with 2-3/8" tubing to 8180' while hydrotesting to 3000 psi.
11. RU cementers. Pump Niobrara plug #1: 25 sxs (35 cf) Class "G" cement 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 cf/sx. The plug will cover 8180' to 7780'. Volume is based on 400' inside 4-1/2" production casing with no excess. RD cementers.
12. Slowly pull out of the cement and PUH to 7600', and reverse circulate tubing clean to ensure no cement is left in the tubing.
13. PUH to 7350'.
14. RU cementers. Pump Niobrara balanced plug #2: 25 sxs (35 cf) Class "G" cement 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 cf/sx. The plug will cover 7350' to 6950'. Volume is based on 400' inside 4-1/2" production casing with no excess. RD cementers.
15. Slowly pull out of the cement and PUH to 6700', and reverse circulate tubing clean to ensure no cement is left in the tubing.
16. WOC per cement company recommendation. Tag cement. Cement top needs to be above 6957' (400' above the Niobrara TOP at 7357').
17. PUH to 4910'.
18. RU Cementers. Pump Sussex balanced plug: 30 sxs (35 cf) Class "G" cement, 0.4% CD-32, 0.4% ASA-301 mixed at 15.8 ppg and 1.15 cf/sx. The plug will cover 4910' - 4510'. Volume is based on 400' in 4-1/2" production casing with no excess. RD cementers.
19. PUH to 4200' and reverse circulate to ensure no cement is left in the tubing.
20. WOC per cement company recommendation. Tag cement. Cement top needs to be above 4509' (200' above the Sussex TOP at 4709').
21. TOOH and SB 1560' 2-3/8" tubing.
22. RU WL. RIH and cut casing at 890'. RD WL.
23. Circulate with fresh water containing biocide to remove any gas.
24. Un-land casing. ND BOP, ND TH. Install BOP on casing head with 4-1/2" pipe rams.
25. TOOH and LD 890' of 4-1/2" casing. Remove 4-1/2" pipe rams and install 2-3/8" pipe rams.
26. RIH with 2-3/8" tubing to 1560'.
27. RU Cementers. Pump Stub Plug: 60 sxs (80 cf) Type III cement w/ CaCl₂ as deemed necessary by the cementing company, mixed at 14.8 ppg and 1.33 cf/sx (670' in 4-1/2" production casing with no excess, 60' in 8-5/8" surface casing with no excess). The plug will cover 1560' - 830'. RD cementers.
28. Pull up to 500' and circulate tubing clean using fresh water treated with biocide.
29. WOC per cement company recommendation. Tag cement. Cement top needs to be above 844'. TOOH.
30. MIRU WL. RIH 8-5/8" CIBP to 80'. Set and pressure test to 1000 psi for 15 minutes. RDMO WL and WO rig.
31. 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 the job.
32. Supervisor submit paper copies of all invoices, logs, and reports to Evans Engineering Specialist.
33. Excavation crew to notify One Call to clear excavation area around wellhead and for flow lines.
34. Excavate hole around surface casing enough to allow welder to cut casing a minimum 5' below ground level.
35. Welder cut casing minimum 5' below ground level.
36. Fill casing to surface using 4500 psi compressive strength cement (NO gravel).
37. Spot weld on steel marker plate. Marker should contain Well name, Well number, legal location (1/4 1/4 descriptor) and API number.
38. Obtain GPS location data as per COGCC Rule 215 and send to rscDJVendors@anadarko.com.

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: 3/26/2015 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: 4/19/2015

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 10/18/2015

<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) If unable to pull casing contact COGCC for plugging modifications.</p> <p>3) For 1560' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 450' or shallower to isolate Laramie Fox Hills aquifer from shallower Lower Arapahoe aquifer. Increase cement volumes accordingly.</p> <p>4) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.</p> <p>5) Please verify production casing cement volumes pumped through DV tool and update either wellbore diagram or form 6 (s) with correct cement volumes (Form 5 and 6 (i) list 675 sxs whereas attached WBD lists 975 sxs).</p>

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400815748	FORM 6 INTENT SUBMITTED
400815752	PROPOSED PLUGGING PROCEDURE
400815753	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 11/21/2011 & 10/11/2012.	4/2/2015 8:20:47 AM

Total: 1 comment(s)