

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:

400600388

Date Received:

05/01/2014

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: 100322

Contact Name: Cheryl Light

Name of Operator: NOBLE ENERGY INC

Phone: (720) 929-6461

Address: 1625 BROADWAY STE 2200

Fax: (720) 929-7461

City: DENVER State: CO Zip: 80202

Email: Cheryl.Light@anadarko.com

For "Intent" 24 hour notice required,

Name: MONTOYA, JOHN

Tel: (970) 3974124

COGCC contact:

Email: john.montoya@state.co.us

API Number 05-123-16515-00

Well Name: CANNON RED W

Well Number: 15-12

Location: QtrQtr: NWSW Section: 15 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: 40.136358

Longitude: -104.770453

GPS Data:

Date of Measurement: 05/09/2008

PDOP Reading: 2.1

GPS Instrument Operator's Name: Paul Tappy

Reason for Abandonment:

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

Estimated Depth: 1480

Fish in Hole: ☐ Yes☒ No

If yes, explain details below

Wellbore has Uncemented Casing leaks:

☐ Yes☐ No

If yes, explain details below

Details: Casing repair completed on 06/05/2000. 98 joints of 3-1/2" (7.70#) CSG. from 10' to 4117' and 1 jt of 5-1/2" CSG. patch from 4117 to 4124.

Current and Previously Abandoned Zones

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
CODELL	7478	7488			
NIOBRARA	7178	7260			

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	800	560	800	0	VISU
1ST	7+7/8	3+1/2	9.3 & 7.7	7,662	600	7,662	6,600	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 7120 with 20 sacks cmt on top. CIBP #2: Depth 80 with 23 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 40 sks cmt from 4800 ft. to 4000 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 _____ 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 430 sacks half in. half out surface casing from 1580 ft. to 460 ft. Plug Tagged: ☒

Set _____ 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:

Note: 3-1/2" (7.7#) casing from 10' to 4124' & 3-1/2" (9.3#) casing from 4124' – 7662'.

1. Call foreman or Lead Operator before rig up to isolate and remove automation and production equipment. Install fence if needed.
2. MIRU slickline services. Pull bumper spring, tag bottom.
3. Provide notice to COGCC 48 hrs. prior to MIRU per Form 6 COA.
4. Notify IOC when rig moves on location to generate work order for flowline removal and one call for line locates.
5. Prepare location for base beam rig.
6. MIRU WO rig. Kill well; circulate as necessary, with water containing biocide. ND wellhead. NU BOP's. Unseat landing joint and lay down.
7. Place cement services on will call when rig moves on location, providing expected volumes of cement needed. 1.) NBCD plug – 20 sacks of "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; 2.) SXSH plug - 20 sacks of "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 and 3.) Top plug – 430 sacks of Type III with celloflake and CaCl₂ mixed at 14.0 ppg and 1.53 cuft/sk considering hole size of 12" and 20% excess. Please see WBD for cement blends.
8. TOOH and stand back 1-66" (O.D.) TBG.
9. MIRU wireline services. RIH gauge ring for 3-1/2" (9.3#) casing to 7200'.
10. PU 3-1/2" CIBP and RIH on W/L to +/-7120'. Set CIBP. P/T CIBP to 1000 psi. (casing patch at 4117').
11. PU RIH with CCL-GR-CBL-VDL. Run from +/- 7100' to surface to verify cement behind 3-1/2" CSG. Email log results to engineer. Cement blend and squeeze jobs may be changed based on log results. (NO CBL present to verify estimated TOC at 6600')
12. RIH on 1.66" TBG to +/- 7120'. Hydrotest TBG to 3000 psi while RIH.
13. Initiate circulation using water containing biocide. Note rate, pressure and circulation.
14. MIRU cementing services. Pump 20 sacks "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. Cement from 7120' to 6600'.
15. PUH 18 stands. Circulate (2X TBG Vol + Excess ~ 30 BBLS) to CLR TBG. RD cementing services
16. PUH to 4800' of TBG (78 Stands). LD remainder.
17. Spot 20 sacks of "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. Cement from 4800' to 4400'.
18. PUH 15 stands. Circulate (2X TBG Vol + Excess ~ 2 BBLS) to CLR TBG. RD cementing services.
19. P & SB 1580' (25 stands) of TBG. LD remainder.
20. RU wireline services. Shoot off 3-1/2" (7.7#) CSG at 1480'. RD wireline.
21. Circulate with water w/ biocide to remove any gas from wellbore.
22. NDBOP, NDTH.
23. NU BOP on casing head. Install 3-1/2" pipe rams.
24. TOOH with 3-1/2" casing and LD. Install 1.66" pipe rams.
25. RIH with 1.66" TBG into casing stub to 1580' inside 3-1/2".
26. RU Cementing services. Pump 430 sx of Type III with celloflake and CaCl₂ mixed at 14.0 ppg and 1.53 cuft/sk considering hole size of 12" and 20% excess. Cement from +/- 1580' to 460'.
27. PUH to 600' & circulate water w/ biocide to clear TBG. TOOH. WOC 4 hrs.
28. TIH and tag cement plug. If plug top is below 460', top as necessary.
29. MIRU wireline services. PU 8-5/8" CIBP and RIH to 80'. Set CIBP. Pressure test CIBP to 1000 psi for 15 minutes. If plug tests, RDMO wireline and WO rig.
30. Instruct cementing and wireline contractors to e-mail copies of all job logs/job summaries and invoices to rscDJVendors@anadarko.com within 24 hrs of the completion of the job.
31. Wellsite supervisor turn all paper copies of cementing reports/invoices and logs in to Joleen Kramer. NOTE: During the job, wellsite supervisor should instruct the logging and cementing contractors to e-mail all logs, job reports/invoices to Joleen Kramer.
32. Have excavation contractor notify One-Call to clear for excavating around wellhead and flowline removal.

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: _____ Print Name: Liz Lindow
Title: Regulatory Analyst Date: 5/1/2014 Email: llindow@nobleenergyinc.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: 5/7/2014

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 11/6/2014

COA Type	Description
	<p>Note changes to plugging procedure-see 3 and 5 below:</p> <p>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</p> <p>2) No CBL on file. Run CBL to verify the top of primary cement is at least 200' over Niobrara, at least 50' below Sussex to 50' above Sussex, and adequately isolates the Fox Hills aquifer. If cement does not exist as required, provide this coverage as part of this plugging project.</p> <p>3) Change 20 sx casing plug 4800'-4400' to 40 sx plug 4800'-4000' to include casing patch coverage.</p> <p>4) If unable to pull casing contact COGCC for plugging modifications.</p> <p>5) For 1580' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 460' or shallower. Adjust cement volumes accordingly (TOC change from 600' to 460').</p> <p>6) If 1580' plug tag below 460' add cement or move CIBP from 80' to 163' to ensure isolation of Laramie Fox Hills aquifer from Lower Arapahoe aquifer. Adjust cement volumes above CIBP accordingly.</p> <p>7) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.</p> <p>8) Please submit gyro survey data with Form 6 (s) Subsequent Report of Abandonment.</p>

Attachment Check List

Att Doc Num	Name
400600388	FORM 6 INTENT SUBMITTED
400600411	PROPOSED PLUGGING PROCEDURE
400600412	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

User Group	Comment	Comment Date
Permit	Added Niobrara and Codell perms to Zones tab.	5/5/2014 8:31:18 AM

Total: 1 comment(s)