

Document Number:
401764546

Date Received:
10/11/2018

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: 10110 Contact Name: Kapri McMillan

Name of Operator: GREAT WESTERN OPERATING COMPANY LLC Phone: (970) 364-2826

Address: 1001 17TH STREET #2000 Fax: _____

City: DENVER State: CO Zip: 80202 Email: kmcmillan@gwogco.com

For "Intent" 24 hour notice required, Name: Beardslee, Tom Tel: (970) 420-3935

COGCC contact: Email: tom.beardslee@state.co.us

API Number 05-001-09115-00

Well Name: CHRISTIANSEN Well Number: 12-9

Location: QtrQtr: SWNW Section: 9 Township: 1S Range: 67W Meridian: 6

County: ADAMS Federal, Indian or State Lease Number: _____

Field Name: SPINDLE Field Number: 77900

Notice of Intent to Abandon Subsequent Report of Abandonment

Only Complete the Following Background Information for Intent to Abandon

Latitude: 39.982300 Longitude: -104.899260

GPS Data:
Date of Measurement: 10/11/2004 PDOP Reading: 6.0 GPS Instrument Operator's Name: JARED WILKINSON

Reason for Abandonment: Dry Production Sub-economic Mechanical Problems

Other _____

Casing 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: _____

Current and Previously Abandoned Zones

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
CODELL	7930	7939	05/10/2018	BRIDGE PLUG	7460
FORT HAYS	7910	7922	05/10/2018	BRIDGE PLUG	7460
NIOBRARA	7533	7708	05/10/2018	BRIDGE PLUG	7460
J SAND	8367	8397	05/10/2018	BRIDGE PLUG	8250

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	323	325	323	0	VISU
1ST	7+7/8	4+1/2	11.6	8,530	370	8,530	7,240	CBL
			Stage Tool	5,313	685	5,313	4,656	CBL

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 8300 with 2 sacks cmt on top. CIBP #2: Depth 7450 with 2 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 5320 ft. to 4990 ft. Plug Type: CASING Plug Tagged:
 Set 120 sks cmt from 1300 ft. to 0 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 2500 ft. with 85 sacks. Leave at least 100 ft. in casing 2400 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 _____ sacks half in. half out surface casing from _____ ft. to _____ 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 1105 Yes No *ATTACH JOB SUMMARY

Technical Detail/Comments:
 Note: this well was TA'd on 5/10/2018 for an offset frac safety prep. GWOG is currently in an AOC and it is my understanding that we are not allowed to submit Form 5A's reporting TA status until the well comes up in a batch.
 Fox Hills was stage cemented via a spacer through DV @ 5313'. 370 sx lite from ~1300' to surface, follow with 290 bbls spacer, end with 215 sx lite from 5313'-4663'
 Proposed Plugging Procedure:
 Remove existing RBP's
 Set CIBP @ 8300', dump bail 2 sx class G cmt
 Set CIBP @ 7450', dump bail 2 sx class G cmt
 Pump 25 sx casing plug @ 5320' to approx 4990'
 Perf & squeeze at 2500', squeeze 75 sx through CICR @ 2400', leave 10 sx on top
 Pump surface plug from 1300' to surface with 120 sx class G cmt

I hereby certify all statements made in this form are, to the best of my knowledge, true, correct, and complete.
 Signed: _____ Print Name: Kapri McMillan
 Title: Operations Engineer Date: 10/11/2018 Email: kmcmillan@gwogco.com

Based on the information provided herein, this Well Abandonment Report (Form 6) complies with COGCC Rules and applicable orders and is hereby approved.

BURN, DIANA

COGCC Approved: _____

Date: 11/11/2018

CONDITIONS OF APPROVAL, IF ANY: _____

Expiration Date: 5/10/2019

<u>COA Type</u>	<u>Description</u>
	1) Provide 48 hour notice of plugging MIRU via electronic Form 42. 2) Properly abandon flowlines as per Rule 1105. File electronic Form 42 once abandonment complete. Within 30 days of an operator completing abandonment requirements for an off-location flowline or crude oil transfer line the operator must submit a Flowline Report, Form 44.
	Operator shall implement measures to control unnecessary and excessive venting, to protect the health and safety of the public, and to ensure that vapors and odors from well plugging operations do not constitute a nuisance or hazard to public welfare.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401764546	FORM 6 INTENT SUBMITTED
401765149	WELLBORE DIAGRAM
401780293	WELLBORE DIAGRAM

Total Attach: 3 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	Lower Arapahoe 4805 5047 100.3 355 113 27.29 NNT Laramie-Fox Hills 4108 4367 185.1 1052 793 44.41 NT Deepest 1117' stage cement CBL 1261' - 134'	11/11/2018
Permit	Status ACTIVE - Form 5A to report TA status and bridge plug for offset safety shut in will be submitted under the AOC's special request function. Permitting review complete.	10/24/2018
Permit	Verified as-drilled lat/longs. Verified Form 5 (doc# 308714, 4/1/1993): JSND perf 8367-8397'. Form 5 (doc# 308711, 9/23/1994): CODL perf 7930-7939'; FTHYS perf 7910-7922'; NBRR perf 7533-7553', 7700-7708'. Form 5 (doc# 308699, 3/10/1995): JSND, CODL, FTHYS, NBRR perms open and PR. Production reporting current.	10/24/2018
Permit	Status PENDING - this form may require additional form 5 or 5A information related to AOC.	10/17/2018
Permit	Corrected zones tab. Pass.	10/17/2018
Permit	returned to draft: zones fields incorrectly entered	09/27/2018
Well File Verification	Pass	09/18/2018

Total: 7 comment(s)