

FORM
6Rev
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

Document Number:

401068857

Date Received:

06/28/2016

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: Ty Woodworth

Name of Operator: GREAT WESTERN OPERATING COMPANY LLC

Phone: (970) 274-9254

Address: 1801 BROADWAY #500

Fax:

City: DENVER State: CO Zip: 80202

Email: twoodworth@gwogco.com

For "Intent" 24 hour notice required,

Name: Gomez, Jason

Tel: (970) 573-1277

COGCC contact:

Email: jason.gomez@state.co.us

API Number 05-123-05545-00

Well Name: JONES

Well Number: 2

Location: QtrQtr: NWNE Section: 22 Township: 8N Range: 66W Meridian: 6

County: WELD

Federal, Indian or State Lease Number:

Field Name: PIERCE

Field Number: 69000

☒ Notice of Intent to Abandon☐ Subsequent Report of Abandonment

Only Complete the Following Background Information for Intent to Abandon

Latitude: 40.652630

Longitude: -104.761100

GPS Data:

Date of Measurement: 04/10/2006

PDOP Reading: 6.0

GPS Instrument Operator's Name: LUKE MATZKE

Reason for Abandonment:

☐ Dry☒ Production 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:

Current and Previously Abandoned Zones

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
LYONS	9230	9292			

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+3/4	10+3/4	40.5	519	380	519	0	
1ST	9+0/8	7+0/8	23	9,305	350	9,305	6,776	CALC
2ND	6+3/8	4+1/2	10.5	9,301	150	9,301	7,602	CALC
S.C. 2.1	6+3/8	4+1/2	10.5	5,293	500	5,293	0	CALC

Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth 9130 with 2 sacks cmt on top. CIBP #2: Depth _____ with _____ 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 62 sks cmt from 800 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: ☐
Set _____ sks cmt from _____ ft. to _____ ft. Plug Type: _____ Plug Tagged: ☐

Perforate and squeeze at 7200 ft. with 65 sacks. Leave at least 100 ft. in casing 7000 CICR Depth

Perforate and squeeze at 6700 ft. with 200 sacks. Leave at least 100 ft. in casing 6600 CICR Depth

Perforate and squeeze at 900 ft. with 190 sacks. Leave at least 100 ft. in casing 800 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 1103 ☐ Yes ☐ No *ATTACH JOB SUMMARY

Technical Detail/Comments:

Offset mitigation/COA work for horizontal well T&M DE 22-039HC API 05-123-43241.

The Jones #2 was drilled to the Lyons in 1956. 10-3/4" surface casing to 519'. Base Fox Hills is 615' based off the Cheyenne Basin Aquifer Map. Cased with 7" casing. Calculated top in 9" as drilled hole is 6776'. Nio top is 7118'. It was plugged in 1960, re-entered in 1966, and TA'd in 1988. The objective of this proposed work is to verify/place Nio coverage and isolate the Fox Hills, while abandoning the well.

In 1971 the operator of the Jones #2 ran 4-1/2" casing to bottom (inside the 7") and cemented with 150 sx 50/50 POZ thru the guide shoe and 500 sx 50/50 POZ thru a stage tool at 5293'. Calculated top of stage 1 is 7602' while calc'd top of the stage tool job is surface.

The well as TA'd in 1988 with a Baker Model F packer and latch down plug at 9145'. It is 263 ft away from the proposed horizontal well.

Proposed Procedure:

- RIH set CIBP w/ 2 sx at 9130'

- RU RIH w/ tbg and circulate wellbore to ensure consistent fluid. Run CBL from 9145' to surface to verify cement in 4-1/2"x7" annulus. (I am not confident we will ever be able to verify cement behind the 7" with two strings of casing but I believe the next several steps will ensure isolation.)

- Pump circulation squeeze behind 4-1/2" by shooting lower holes at 7200 ft (top of Nio is 7118 ft) and upper holes at 6700 ft (assuming TOC behind 4-1/2" is deeper). Circulate 65 sx cement thru holes at 7200 ft up to holes at 6700 ft thru CICR at 7000 ft. Leave 1/2 bbl on CICR. This will ensure isolation in the 4-1/2"x7" annulus across and above the Nio.

- Assuming 4-1/2"x7" TOC is below the calculated 7" csgx9" hole TOC of 6776' then perforate again at 6700' with deep penetrators to get through both casing strings. Sqz 200 sx Class G thru retainer set at 6600'. (This should ensure plenty of cement behind the 7" above the Nio if there wasn't any there before, although we won't be able to run a CBL to verify.)

- Perf at 900' w/ deep penetrators to ensure entry thru both strings. Pump and circulate 190 sx Class G thru rtmr at 800' to surface behind the 7" to cover Fox Hills. (I am not confident we will be able to unland the 4-1/2" since its cemented to surface to unland the 7" to tag so we will try to pump until we get cement back, or tag after cutting the wellhead off.)

- Fill 4-1/2" casing to surface from 800 ft with approx. 62 sx cement.

- Cut and cap.

- Unfortunately I don't think we will have any CBLs to verify the new coverage behind 7" but I think this is our best bet to ensure good isolation. Having said that I am always open to suggestions. Please call with questions/concerns. We will save all cement reports for submittal and will communicate any discrepancies encountered or deviations required to COGCC.

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

Signed: _____ Print Name: Ty Woodworth
Title: Prod Eng Lead Date: 6/28/2016 Email: twoodworth@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.

COGCC Approved: HICKEY, MIKE Date: 7/11/2016

CONDITIONS OF APPROVAL, IF ANY: _____ Expiration Date: 1/10/2017

COA Type	Description
	1) Prior to initiation of plugging operations, a bradenhead test shall be performed. If any pressure remains at the conclusion of the test or any liquids were present call COGCC Engineer for sampling requirements. Form 17 shall be submitted within 10 days of the test. 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 3) Properly abandon flowlines. Once flowlines are properly abandoned, file electronic form 42. 4) For 800' plug: pump plug and displace. If cement is not circulated to surface, shut-in, WOC 4 hours and tag plug – top of plug must be not deeper than 469' and provide minimum 10 sx plug inside and outside at the surface. Leave at least 100' of cement in the wellbore for each plug.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401068857	FORM 6 INTENT SUBMITTED
401069192	WELLBORE DIAGRAM
401069193	WELLBORE DIAGRAM
401069195	OTHER

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Engineer	This well has some UIC history. Coordinated with UIC. Plugging requirements are not changed.	7/11/2016 7:52:36 AM
Public Room	Document verification complete 07/05/16	7/5/2016 12:42:29 PM

Total: 2 comment(s)