

**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.

Document Number:  
400697097

Date Received:  
09/30/2014

OGCC Operator Number: 10110 Contact Name: Sam Bradley

Name of Operator: GREAT WESTERN OPERATING COMPANY LLC Phone: (970) 286-3426

Address: 1801 BROADWAY #500 Fax: \_\_\_\_\_

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

**For "Intent" 24 hour notice required,** Name: Johnson, Randell Tel: (303) 815-9641

**COGCC contact:** Email: randell.johnson@state.co.us

API Number 05-123-10372-00

Well Name: BEIERLE Well Number: 1

Location: QtrQtr: SENE Section: 26 Township: 1N 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: 40.025116 Longitude: -104.738734

GPS Data:  
Date of Measurement: 09/24/2014 PDOP Reading: 1.4 GPS Instrument Operator's Name: Derik Drinnen

Reason for Abandonment:  Dry     Production for 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: Well was originally plugged by previous operator 5/19/1982. During the fracture treatment of the J-Sand casing parted at 2,900'. The operator attempted to fix the part with an allignment tool and cement and when they drilled out cement they believe they found tubing on the outside of the casing (it is unclear if this is the allignment tool or some other fish, or an incorrect assumption). They could not get down to the perforations to adequatly plug and thus pumped a plug at the casing part, pulled 4-1/2" from 225', pumped a shoe plug, and a surface plug (see attached current WBD). This well is in proximity to the future horizontal Bierle wells Great Western plans. Please see attached documentation and comments section for the detailed re-entry and re-abandonment of the subject well.

**Current and Previously Abandoned Zones**

Formation	Perf. Top	Perf. Btm	Abandoned Date	Method of Isolation	Plug Depth
J SAND	8084	8092	05/20/1982		

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	9+5/8	36	185	325	185	0	VISU
1ST	7+7/8	4+1/2	10.5&11.6	8,219	325	8,219	7,370	CBL

### Plugging Procedure for Intent and Subsequent Report

CIBP #1: Depth \_\_\_\_\_ with \_\_\_\_\_ 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 30 sks cmt from 8084 ft. to 8092 ft. Plug Type: CASING Plug Tagged:

Set 30 sks cmt from 2900 ft. to 2600 ft. Plug Type: CASING Plug Tagged:

Set 40 sks cmt from 275 ft. to 135 ft. Plug Type: STUB PLUG 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 7350 ft. with 150 sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth

Perforate and squeeze at 4760 ft. with 150 sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth

Perforate and squeeze at 1350 ft. with 375 sacks. Leave at least 100 ft. in casing \_\_\_\_\_ CICR Depth

(Cast Iron Cement Retainer Depth)

Set 10 sacks half in. half out surface casing from 0 ft. to 50 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:

Expedited approval is requested.

Plans to re-abandon the subject well are detailed in the 'Proposed P&A WBD'. The well has been located, and GPS'd (support documentation and pictures attached). The plan is to re-install a wellhead on the surface casing and clean the well out to 225' where 4-1/2" casing was pulled from. We will then tie into the 4-1/2" casing and bring it back up to surface and install a wellhead on the 4-1/2". Then the well will be cleaned out to the part in the 4-1/2" casing at 2,902'. The possible fish in the hole will be investigated and milled up until we can re-enter the 4-1/2" casing below the part or beginning at 2,911'. We will clean out to the original J-Sand perforations that were never isolated with cement and pump 30 sx of cement into the J-Sand perfs. We will then move up hole and perf & squeeze the top of the Niobrara for isolation. We will continue moving up hole and perf and squeeze the Sussex for isolation. Finally we will move up hole to isolate the Fox Hills utilizing a perf and squeeze method. Balanced plugs will be set in the casing across the part at 2,900' and across the surface shoe.

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

Signed: \_\_\_\_\_ Print Name: Sam Bradley

Title: Petroleum Engineer Date: 9/30/2014 Email: sbradley@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: SCHLAGENHAUF, MARK Date: 10/1/2014

<u>COA Type</u>	<u>Description</u>
	<p>Note changes in plugging procedure:</p> <ol style="list-style-type: none"> <li>1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU.</li> <li>2) If can not get past possible obstruction @ approximately 2900' contact COGCC with revised plugging program.</li> <li>3) For 1350' plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 264' or shallower.</li> <li>4) There are three aquifers present (Laramie Fox Hills, Lower Arapahoe, Upper Arapahoe) and this plugging should ensure that all three aquifers are isolated.</li> <li>5) If unable to pull casing contact COGCC for plugging modifications.</li> <li>6) Instead of casing plug @ 185' set stub plug of at least 100' at a depth 50' below casing cut. Increase cement volumes accordingly. For stub plug: pump plug and displace, shut-in, WOC 4 hours and tag plug – must be 135' or shallower. If stub plug not circulated to surface then place 10 sx inside casing at surface. Leave at least 100' for each plug.</li> <li>7) Properly abandon flowlines as per Rule 1103. File electronic Form 42 once abandonment complete.</li> <li>8) If gyro survey run please submit gyro survey data with form 6 (s) Subsequent Report of Abandonment.</li> <li>8) If gyro survey run please submit gyro survey data with form 6 (i) Subsequent Report of Abandonment.</li> </ol>

**Attachment Check List**

<u>Att Doc Num</u>	<u>Name</u>
400697097	FORM 6 INTENT SUBMITTED
400697138	WELLBORE DIAGRAM
400697140	WELLBORE DIAGRAM
400697171	LOCATION PHOTO
400698389	SURFACE OWNER CONSENT

Total Attach: 5 Files

**General Comments**

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Well Completion Report dated 7/1/1982.	9/30/2014 3:39:21 PM

Total: 1 comment(s)