

From: [Henline, Amy C.](#)
To: [Craig Burger - DNR \(Craig.Burger@state.co.us\)](#)
Cc: [Buchanan, Leah N.](#)
Subject: Warning Letter #2597120 Federal #26-1 API # 077-08494
Date: Monday, December 29, 2014 11:14:19 AM
Attachments: [20141125WarningLetter2597120EncanaP&ACOA.PDF](#)
[RE Shire Gulch 26-1 \(API#05-0077-08494-00\) PA Procedure Follow-Up \(24.3 KB\).msg](#)
Importance: High

COGCC doc #2597135

Hello Mr. Burger,

In response to the attached warning letter issued by the COGCC on November 26, 2014, Encana is providing a written response to the following Conditions of Approval:

1. Comply with all conditions of approval on forms approved by the COGCC. Provide a written justification that demonstrates that the current plug placements are adequate to permanently prevent migration of oil, gas, water or other substances from the formation or horizon in which it originally occurred.
 - Encana contacted Mr. Craig Burger, COGCC Engineer, once it was discovered that the COA documented in the approved Form 6 Notice of Intent to P&A was overlooked.
 - Encana engineer, Zeke Boles, evaluated the current plugging configuration, and after consulting with Encana's Piceance Geology department, found it to be satisfactory per the following evaluation (full evaluation can be found in the attached correspondence):
 - Confirmed the observation of fresh water below the surface casing shoe at 235' based on high resistivity from the resistivity log. We interpret the base of the fresh water sands to be at 1470' based on the change from high to low resistivity.
 - From surface to the top of cement at 2163', no crossover on the neutron-density log is identified. This is an indication of water and a lack of gas filled porosity. Therefore, we don't believe there are any gas filled sands from surface to the top of cement at 2163'.
 - The only depths in the wellbore that show neutron-density crossover, and therefore gas filled porosity, are in the Cozette and Corcoran formations between 2780-3030'.
 - Top of cement is at 2163', which is 617' above the top perf at 2780'. This well has good cement coverage above the producing interval.
 - Based on the information above, we feel there is very little risk for communication between the uphole fresh water sands and any hydrocarbon bearing interval in the wellbore.
 - Mr. Boles & Mr. Burger discussed the wellbore configuration, and the well was

deemed satisfactorily plugged & abandoned by Mr. Burger. The attached email correspondence documents Ms. Leah Buchanan, Mr. Boles & Mr. Burger's conversation regarding the plug & abandonment of the subject well.

2. Submit a written response to this Warning Letter, specifying how Operator will change its internal procedures to prevent recurrence of this alleged violation.

Encana's Piceance team has made the following changes to the P&A program to ensure that all COGCC and BLM Conditions of Approval (COA's) are incorporated into the P&A procedures and are completed as intended.

- Upon receiving the COA's, the engineer responsible for the P&A will modify the existing procedure to include the steps of each COA.
- Then, the final P&A procedure with COA steps included will be submitted to the field staff.
 - Previously, COA's were attached separately to the P&A procedure, but the original procedure was not modified with the COA steps. The team believes this change should eliminate the possibility of missing COA steps in the future.

Encana requests that this email correspondence, as well as the attached warning letter & previous email correspondence be saved in the respective well file in the COGCC facilities database. If you have any questions regarding the above mentioned conditions of approval, please contact me for more information.

Thank you for your assistance in this matter.

Amy Henline
Regulatory Analyst
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From: [Craig Burger - DNR](#)
To: [Buchanan, Leah N.](#)
Cc: [Henline, Amy C.](#); [Boles, Ezekiel R.](#)
Subject: RE: Shire Gulch 26-1 (API#05-0077-08494-00) P&A Procedure Follow-Up
Date: Monday, November 17, 2014 8:54:35 AM

Leah,
We will allow you to leave the wellbore as currently P&A'd.
Please attach this correspondence to the Form 6 SRA.

Craig Burger
Northwest Area Engineer



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From: Buchanan, Leah N. [mailto:Leah.Buchanan@encana.com]
Sent: Wednesday, November 05, 2014 1:47 PM
To: Craig Burger (craig_burger@state.co.us)
Cc: Henline, Amy C.; Boles, Ezekiel R.
Subject: Shire Gulch 26-1 (API#05-0077-08494-00) P&A Procedure Follow-Up

Craig,

Thanks so very much for your time this afternoon in regards to the P&A procedures for the above-referenced well. Please see below for a summary of the logs on the Shire Gulch Federal 26-1. These logs are attached for your reference.

After reviewing the well logs with our geologist yesterday morning, we believe that the current cement placement should be adequate for the P&A of the Shire Gulch Federal 26-1.

- Confirmed the observation of fresh water below the surface casing shoe at 235' based on high resistivity from the resistivity log. We interpret the base of the fresh water sands to be at 1470' based on the change from high to low resistivity.
- From surface to the top of cement at 2163', no crossover on the neutron-density log is identified. This is an indication of water and a lack of gas filled porosity. Therefore, we don't believe there are any gas filled sands from surface to the top of cement at 2163'.
- The only depths in the wellbore that show neutron-density crossover, and therefore gas filled porosity, are in the Cozette and Corcoran formations between 2780-3030'.
- Top of cement is at 2163', which is 617' above the top perf at 2780'. This well has good cement coverage above the producing interval.
- Based on the information above, we feel there is very little risk for communication

between the uphole fresh water sands and any hydrocarbon bearing interval in the wellbore.

We'd like to request approval to leave the wellbore as currently P&A'd. We apologize for the miscommunication on this well and have made changes to our P&A process that should prevent us from missing any COA's in the future. Please feel free to give us a call to discuss if there are any questions. Additionally, please let us know what we can do from a regulatory perspective in terms of paperwork or any reports that you may require.

Once again, we appreciate your consideration on this matter.

Best,

Leah Buchanan
Regulatory Analyst
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