

STATE OF
COLORADO

Young - DNR, Rob <rob.young@state.co.us>

Form 27 ECGS Ron Nelson Water Well (Rem #9425)

2 messages

Sutphin - DNR, Dirk <dirk.sutphin@state.co.us>

Wed, Feb 24, 2016 at 4:03 PM

To: rrichards@mehllc.com

Cc: Greg Francis <gfrancis@mehllc.com>, Rob Young - DNR <rob.young@state.co.us>, Diana Burn - DNR <diana.burn@state.co.us>

Ron,

I am the COGCC engineer for this area. I approved the Form 6 - Subsequent Report of Abandonment #400982397 received 2/8/16. This completes the Condition #7.

I had initially thought that the Schwake #3 well was a likely candidate for causing the WW impact, since the original 1957 plugging was not the best, and we had not received information regarding the current status of the well. The well was replugged in December 2010 by Schneider Energy Services, Inc. for ECGS. According to the operations summary attached to the Form 6 on 8/13/10 they had problems getting the casing patch at 4148' to hold pressure. On 11/4/10 - 11/5/10 they set 110 sx cement in the casing (60 sx at 4280' + 50 sx at 4225'). This cement was drilled out and the patch still leaked. On 12/9/10 100 sks of cement was placed at 4150' - 3492' in the casing. Some of this cement may have gone out into the annulus to form a seal at the leaky patch. After WOC 3 hrs and tagging the top of the 100' sk plug at 3492' there was a 75 sk cement plug squeezed at 1425'. Then casing was perfed at 300' and a 120 sx plug was pumped around to surface.

I am not entirely confident in this plugging due the the leaky casing patch at 4148', the plug at 4150-3492 is mainly just in casing, and the well was not drilled out deep enough to place a new plug at 5370'-5100' across the J-Sand perms, as required on the 2010 Form 6-NOI #1906171. The deepest they got was 4415' on 8/16/2010. Top of cement outside the 5-1/2" casing is unknown but was stated as 4775' on the 2010 intent to abandon. According to the 1957 plugging records there was only a 5 sk cement plug set at 5260' on sand & gravel over the J-Sand perms 5317'-5308'. Then casing was cut and recovered at 4089'. The 2010 patch at 4148' was being done to rejoin the casing string at the 1957 casing cut. The 75 sk squeeze at 1425' seems like a good plug and it is deeper than the 1020' Nelson water well.

I want to see how far you have gotten on COA #8:

Perform a well evaluation of all oil & gas, injection, and gas storage wells, including plugged wells, within 0.75 miles of the Nelson water well to determine if any well has the possibility of having caused the problem.

- a) Perform and submit bradenhead tests Form 17's.
 - b) Review all well records, top of cement, stage and remedial cement, depth of surface casing, bradenhead pressure, plugging records, well integrity issues, production history, etc. Identify any likely candidates.
 - c) Recommend remedial work.
- Timeframe: 60 days.

Please let me know how the effort to identify the cause of the WW impact is going.

Thank you,

Dirk Sutphin, PE

East Region Engineer

**COLORADO**
Oil & Gas Conservation
Commission
Department of Natural Resources

P 303.894.2100 x5107 | F 303.894.2109

1120 Lincoln Street, Suite 801, Denver, CO 80203

dirk.sutphin@state.co.us | www.colorado.gov/cogcc

Ron Richards <rrichards@mehllc.com>

Fri, Feb 26, 2016 at 11:25 AM

To: "Sutphin - DNR, Dirk" <dirk.sutphin@state.co.us>

Cc: Greg Francis <gfrancis@mehllc.com>, Rob Young - DNR <rob.young@state.co.us>, Diana Burn - DNR <diana.burn@state.co.us>, James Hoff <jhoff@mehllc.com>, Scott Smith <ssmith@mehllc.com>

Dirk,

With regard to COA #8 status is the following:

a) We will complete bradenhead testing today and will submit the Form 17's next week. We are evaluating the results of the testing along with information gleaned from the well record review and will provide, in addition to the aforementioned Forms, a description of our next steps of evaluations.

b) With regard to records review, we approx. 62% complete with the review of the wells within the .75 mile radius.

Thanks,

Ron

From: "Sutphin - DNR, Dirk" <dirk.sutphin@state.co.us>

Date: Wednesday, February 24, 2016 at 5:03 PM

To: Ronald Richards <rrichards@mehllc.com>

Cc: Greg Francis <gfrancis@mehllc.com>, Rob Young - DNR <rob.young@state.co.us>, Diana Burn - DNR <diana.burn@state.co.us>

Subject: Form 27 ECGS Ron Nelson Water Well (Rem #9425)

[Quoted text hidden]