From: Koehler, Bob
Sent: Friday, December 19, 2008 7:19 AM
To: McGough, Joyce
Cc: King, Kevin
Subject: EnCana: Divide Creek #22, #25, & #27 Abandonments

Dear Joyce,

COGCC has been wrestling with three Subsequent Reports of Abandonment you submitted for three EnCana Divide Creek wells as listed below. We want updated borehole diagrams showing the current status, i.e. plugged, of each well so we can compare the Form 6 – Subsequent Report of Abandonment, the Cement Ticket, and new borehole diagram.

Note that these wells were abandoned in 2002 and COGCC only received Subsequent Reports of Abandonment in May of 2008.

Please send the diagrams to my attention by January 30, 2009.

EnCana Oil & Gas (USA) Inc
Mesa County, Colorado

Divide Creek #22	Divide Creek #25	Divide Creek #27
NWSW 14-8S-91W	NENW 22-8S-91W	SWNW 23-8S-91W
API: 05-077-08574	API: 05-077-08586	API: 05-077-08587

As an example (it's the only one I worked up in detail) of the problems we are having here are some specific questions about the Divide Creek #25 well. I'll write the actual text in blue and put my question below in red.

Step 1
Set 100 sks cmt from 0 ft. to 2850 ft. in ... annulus
The first cement pumped in the cement ticket series was 41 bbl (15:23 on Page 0). Because the plugging procedure begins at the bottom of the well and works its way up hole I assume this event was intended to plug the perfs from 2909'-3662' below a cement retainer at 2847'. Working backward from 41 barrels (assume Class G cement with a yield of 1.15 cu ft/sack) I get 200 sacks for this operation. Did you mean that 200 sacks were set from 2850' to 3662' (bottom of perfs) in the annulus? I find it hard to believe that 100 sacks covered from 0' to 2850' in the annulus.

Step 2
Set 35 sks cmt from 1200 ft. to 1500 ft. in ... open hole
The second cement entry in the cement tickets says 7.2 bbls of cement were used (08:36 Page 1). Using the same assumptions as above 7.2 bbls is about 35 sacks. If placed inside the 5-1/2" production casing 7.2 bbls would nicely cover about 300', so maybe this one is OK covering 1200' to 1500'. But why did you say "Open Hole", there isn't any "Open Hole"?

Step 3
Set 100 sacks half in, half out surface casing from 481 (to?) 581 ft.
This one is nasty and I am not sure I am even looking at the same thing comparing the Form entry and the cement tickets. The third step in the cement tickets was a plug of 79.8 bbls. This works out to 390 sacks. Nowhere does the subsequent report indicate a cement plug of this magnitude. So on the Form what happened to the 390 sacks?

Ignoring that and starting over with 100 sacks. Were there any perfs involved in the blue quoted line? Usually perfs are made in the production string below the surface casing. Was cement squeezed into the perfs at 581'; up the annulus between the outside of the production string and the hole and into the annulus between the surface and production

casings? This cement might satisfy the "half out" part of the statement. Cement left inside the production string (top = 4781'?) would satisfy the "half in" part. Where are the 100 sacks on the cement ticket (approximately 25 bbls)?

Step 4
Set 120 feet surface plug in casing.
Cement tickets say the well was topped out with 28.6 bbls of cement (09:09 Page 1). For Class G cement this works out to be about 140 sacks. Where does the Form 6 say 140 sacks where used?
Does the 120' of cement = 140 sacks? For 5-1/2 inch, 15.5 pound per foot casing 28.6 bbls of cement would cover about 1200 linear feet. What actually was meant by 120' surface plug in casing? We appear to have a large amount of extra cement if it was put into the 5-1/2" casing only. What casing was the plug put in? I expect it was put not only in the 5-1/2" casing but also in the 5-1/2" to 8-5/8" annulus.

Cheers,
BOB KOEHLER

Engineering/Environmental Technician
Colorado Oil and Gas Conservation Commission

Telephone: 303-894-2100 x147 **Email: Bob.Koehler@state.co.us**
Facsimile: 303-894-2109 **Website: www.colorado.gov/cogcc**

Note that I will be out of the office Monday 12/29/2008 through Monday 1/5/2009.

12/17/2008: Note the State just announced a new website address for the COGCC!!!!! For the time being using the new name or the old one will still get you to: www.COGCC.state.co.us in your browser.