

From: Sankar, Sam <Sam.Sankar@OilSpillCommission.gov>
Sent: Tue, 26 Oct 2010 16:10:18 GMT
To: Gardner, Craig (Craig.Gardner)
CC: Erik Nelson <eriknelson@mac.com>
Subject: RE: Draft Chevron report is attached

My apologies Craig– I was using the word “stable” in the wrong way.

Sambhav N. "Sam" Sankar
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From: Gardner, Craig (Craig.Gardner) [mailto:Craig.Gardner@chevron.com]
Sent: Tuesday, October 26, 2010 12:09 PM
To: Sankar, Sam; Eaton, Jackson; Bartlit, Fred; Harris, Brent; Monger, Jon; Sean.Grimsley@bartlit-beck.com; Sears, Richard; Tice, Saritha
Cc: Erik Nelson
Subject: RE: Draft Chevron report is attached

Hello all,

For clarification in item two: the highlighted section below is not correct. We were never able to attain a stable foam and that instability contributed to the density variations we saw in all the tests.

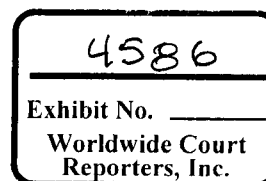
Thanks

Craig Gardner ..
Team Leader - Cementing
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From: Sankar, Sam [mailto:Sam.Sankar@OilSpillCommission.gov]
Sent: Tuesday, October 26, 2010 8:41 AM
To: Eaton, Jackson; Bartlit, Fred; Harris, Brent; Monger, Jon; Sankar, Sam; Sean Grimsley (Sean.Grimsley@bartlit-beck.com); Sears, Richard; Tice, Saritha
Cc: Gardner, Craig (Craig.Gardner); 'Erik Nelson'
Subject: Draft Chevron report is attached



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This is Chevron's DRAFT and NOT FOR RELEASE outside our team.

Please also note that I have copied Craig Gardner and Erik Nelson on this email.

My takeaway messages:

1. Most tests yielded results similar to Halliburton's.
2. Chevron did nine tests to examine foam stability, varying methods each time. None yielded a result indicating a stable foam. Reasons vary. In some cases, the foam density segregated – top was lighter than bottom. In others, the resulting foam was stable but was not the proper density. This too indicates a problem – if the procedure generates a foam of the wrong quality, then that may be a slurry issue.
3. I attach the table reporting the numeric results from foam stability tests.
 - a. Tests 1, 2, and 3 are using no conditioning.
 - b. Test 4 was with 20 minutes conditioning.
 - c. Test 5 was with an "offset" factor designed to correct for over-foaming in the earlier samples.
 - d. Tests 6,7,9 were with 3 hours conditioning
 - e. Test 8 was with a different batch of cement (but same additives) to make sure it wasn't just a bad batch of cement.

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4. Contamination of the base slurry with mud did affect the eventual strength of the cement, but did not greatly affect the initial rate of strength development. That is, the cement got to about 100 psi strength at the same rate no matter how badly contaminated it was, but at higher levels of contamination the cement did not develop its full strength. Those tests were performed at 15,000 psi and high temperature.

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