

Tests warned of cement troubles before BP blowout

Dina Cappiello, Associated Press, 10-28-10

WASHINGTON – Tests performed before the deadly blowout of BP's oil well in the Gulf of Mexico should have raised doubts about the cement used to seal the well, but the company and its cementing contractor used it anyway, investigators with the president's oil spill commission said Thursday.

It's the first finding from the commission looking into the causes of the April 20 explosion that killed 11 workers and led to the largest offshore oil spill in U.S. history. And it appears to conflict with statements made by Halliburton Co., which has said its tests showed the cement mix was stable. The company instead has said BP's well design and operations were responsible for the disaster.

The cement mix's failure to prevent oil and gas from entering the well has been identified by BP and others as one of the causes of the accident.

BP and Halliburton decided to use a foam slurry created by injecting nitrogen into cement to secure the bottom of the well, a decision outside experts have criticized.

The panel said that of four tests done in February and April by Halliburton, only one — the last — showed the mix would hold. But the results of that single successful test were not shared with BP, and may not have reached Halliburton, before the cement was pumped, according to a letter sent to commissioners Thursday by chief investigative counsel Fred H. Bartlit Jr.

BP had in hand at the time of the blowout the results of only one of the tests — a February analysis sent to BP by Halliburton in a March 8 e-mail that indicated the cement could fail. The slurry tested in that case was a slightly different blend, and assumed a slightly different well design, but there is no indication that Halliburton flagged the problem for BP, or that BP had concerns, the letter said.

"Halliburton (and perhaps BP) should have considered redesigning the foam slurry before pumping it at the Macondo well," Bartlit wrote.

Independent tests conducted for the commission by Chevron on a nearly identical mixture were also released Thursday. The results concluded that the cement mix was unstable, raising questions about the validity of Halliburton's final test.

BP, as part of its internal investigation, also conducted independent tests that showed the cement mix was flawed, but its analysis was criticized by Halliburton, which said it was not the correct formula. BP's report also mentioned a cement test Halliburton performed in mid-April, but it appears BP obtained the results after the accident and considered its methods flawed.

By contrast, the commission obtained proprietary additives from Halliburton as well as a recipe to re-create the slurry that was used on the well. One and a half gallons of the actual mix used on the rig remain, but it is being held as evidence in criminal and civil investigations.

A spokeswoman for Halliburton said the company was reviewing the findings and would have a response later Thursday.

Halliburton shares dropped from near \$34 to below \$30 in New York trading in the half hour after the

commission released its finding. The shares recovered a bit, and closed at \$31.68, down \$2.74, or 8 percent.

In testimony before the joint Coast Guard-Bureau of Ocean Energy Management investigative panel, Halliburton engineer Jesse Gagliano, when asked if he would pour the same cement again, said he would.

"I am comfortable with the slurry design," he said.

The independent investigators do not address other decisions that could have contributed to the cement's failure, such as BP's decision to use fewer centralizers than recommended by Halliburton. Centralizers make sure the well's piping is centered inside the well so the cement bonds correctly.

BP has also been criticized for not performing a cement bond log, a test that checks after the cement is pumped down whether it is secure. There are also questions about whether BP pumped down enough cement to seal off the bottom of the well, which was located more than three miles below sea level.