BP had prior warning of Deepwater Horizon blowout

Andre Damon
27 May 2010

BP, which leased the Deepwater Horizon oil rig, disregarded indications hours before the April 20 blast that the rig might suffer a catastrophic blowout, according to a preliminary report published Wednesday by the House Energy and Commerce committee.

The report showed that the Deepwater Horizon had received evidence of 'kicks' of oil and natural gas coming up the drill pipe several times before the blowout, but disregarded them and went ahead with its effort to cap the well. The report also outlined multiple safety failures on systems involved in making sure that the well remained under control.

On the day of the disaster, the Deepwater Horizon had just finished drilling an exploratory well and was in the process of capping it in order for a different vessel to harvest the oil. Halliburton, which was in charge of capping the well with cement, had just finished putting a cement plug at the well's bottom, and BP wanted to finish the job as soon as possible in order to avoid paying the $500,000-per-day rental fee on the rig any longer than absolutely necessary.

At 5:05 P.M., nearly five hours before the blast, the Deepwater Horizon's crew found unusually low pressure inside the riser pipe connecting it to the ocean bottom, "suggesting there were leaks" in one part of the blowout preventer.

The crew received yet another warning two hours before the explosion, when, after a test that involved reducing the well's pressure, the pipe filled up with three times more fluid than previously expected.

In a follow-up test, the crew found abnormally high pressure on the "kill line," one of the pipes connecting the rig to the blowout preventer on the ocean bottom. Despite the fact that this was an “indicator of a very large abnormality,” BP concluded it was “satisfied" the test was "successful."

At this time, a witness on the rig said the “well continued to flow and spurted,” despite the fact that no drilling was going on. The fact that fluid was being forced up the drill pipe was evidence something was very wrong, and this indication, coupled with the failure of the tests, should have been enough to halt the process and begin an emergency response, including activating some of the valves on the blowout preventer.

But since BP was "satisfied" with the results of the pressure test, it then decided, two hours before the blowout, to replace the heavier drilling mud inside the well with seawater.

While this process was underway, the crew received numerous other direct readings that seawater was flowing up the pipe, including three separate readings, all within an hour of the explosion. Eighteen minutes before the explosion, the rig's pump stopped working.

The House Committee's report noted at this point, the crew attempted "mechanical interventions" in order to control the blowout, meaning they may have tried to activate the blowout preventer.

When this was done, the blowout preventer malfunctioned in several places. The blowout preventer unit, a five-story stack of heavy-duty shutoff valves, was designed to stop the flow of oil and gas in the event of a "kick" like the one that had been observed. The unit included a series of valves, ranging from the light-duty annular valve to the last-ditch shear rams, all of which failed.

The fact that so many systems failed simultaneously, after BP ignored continual warnings and abnormalities, show clear signs of negligence on the company's part. BP wantonly disregarded the safety of its crew, and of the natural environment, in order to cut costs. There is no reason to believe that BP executives on shore were unaware of the test results. It is more likely they

ordered the crew to continue capping the well despite ample warnings of a potential disaster.

Witnesses called to testify at hearings held in Washington said they had seen confrontations between representatives of BP, which was leasing the rig, and Transocean, which owned it, over the capping process. One of the witnesses said representatives of BP and other oil companies were often the "outright adversaries" of employees seeking to maintain the safety of the drilling operations.

Transocean's chief mechanic on the rig, Douglas H. Brown, said representatives from BP and Transocean had argued the morning of the disaster over the question of replacing drilling mud with much lighter saltwater, which experts have criticized as particularly risky.

Meanwhile BP on Wednesday began its latest attempt to stop the well, referred to as a "top kill," in which the company will attempt to pump heavy drilling mud into the blowout preventer at the bottom of the ocean in order to clog the pipe.

BP gave the plan, which has never been attempted at this depth, a 60-70 percent chance of succeeding. BP Chief executive Tony Hayward said the outcome of the plan would not be known for up to two days. It also possible the failure of the plan could actually increase the amount of oil being released into the Gulf of Mexico.