



BP's Deepwater Oil Spill - Preparing to Move - and Open Thread

Posted by [Heading Out](#) on September 2, 2010 - 10:25am

Topic: [Environment/Sustainability](#)

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The annotations to the [ROV feeds from BP](#) are becoming a little more descriptive, particularly with those related to the Q4000, which will be playing a significant part in the replacement of the blowout preventer (BOP) on the Deepwater Horizon well. However, at 9 pm on the 1st, with the waves still a little higher than desired, the activity has yet to start.

One of the new camera feeds that is being displayed is a [weight indicator](#) on the deck of the Q4000. This is not yet on line, but Admiral Allen [pointed out on Wednesday](#) the loads that will come onto the vessel.

We anticipate removing the blowout preventer with the latching mechanism that will be attached to a drill pipe string that will be suspended from the Q4000.

The combined weight of the drill string, the latching mechanism and the blowout preventer itself is approximately a million pounds. When they released that blowout preventer from the well it will be suspended at about 5000 feet below the surface.

There are two things we're concerned about when this occurs, number one is the wave height. You can imagine the Q4000 riding up and down on the waves. When they ride up it exerts more dynamic loading on that pipe system. So we're concerned about the weight and the ability of the pipe system to handle that.

Before the BOP itself is removed, the capping stack has to be taken off. The latching mechanism to attach to that is already down underwater, and is being monitored by the Enterprise, through ROV2. The stack will come off first, and it is that activity which is now expected to start at noon on Thursday.

Once the Q4000 latches onto the original BOP, it is going to raise it up, through the platform of the vessel, and then set it back down on that deck. There are two additional static cameras on the Q4000 which are monitoring the moon pool, and which are presumably going to be carrying all this activity starting Thursday and running perhaps 36 hours, depending on the weather and how easily the BOP assembly breaks away from the well.

As soon as the Q4000 has the BOP on board, it has to move out of the way (and trans-ship the parts of the BOP, once separated to smaller ships to be sent ashore) so that the new BOP can be put in place.

This is the task for Development Driller 2, but before the job is finished the BOP has to be thoroughly tested to ensure that everything is now functional, the BOP will then be ready for the final stages. At this point it will be possible to restart the relief well to complete the bottom kill. That is still not anticipated to start until after Labor Day.

I am going to insert the quote on what the Admiral said on hydrates it its entirety, since I am not sure exactly what his point was.

Hello, Admiral. Can you tell me how the current BOP is attached to the well head and if there's any concern about hydrates or other (inaudible) that might make it difficult to latch?

Thad Allen: Well, the current BOP is attached to the wellhead with the same connector they would use for any similar drilling well. To the extent that hydrates are there, we don't expect that to be a problem right now. Had we continued to try and fish and get the pipe out of there, there was some concerns that hydrates would be blocking our ability to use a camera and actually operate down there. So I'm not sure that's an issue. If there's an issue at all, it's probably the issue of the condition of the wellhead itself. When the Deepwater Horizon exploded and sank it bent the riser pipe over and ultimately the riser pipe was severed from the drill rig. At that point, if you can imagine, as massive as the blowout preventer was and that wellhead was, it probably bent over to some extent and then when the riser pipe separated from the rig it popped back up. It did not pop straight back up and there's been some attempt to level that, to make sure we could get that as close to vertical as we can. I believe the current estimate right now, it is about two degrees off center line. So as we go in to pull the blow out preventer out, I would say hydrates are not a real big concern. I think the alignment to the true vertical about two degrees off would impact somehow to a very small degree the pull on the BOP as you're trying to free it. We are aware of it. The engineers have taken that into account. We don't think it will be a prohibiting condition, but it is something we are aware of.

In the other story that I have been watching, that of the miners in Chile, the equipment has started, and the preliminary drilling of the central shaft is now down more that 20 m. At the same time the rescuers are considering ways of [reaming one of the smaller drill holes](#) that have already reached the area. This might take a greater number of stages to get the hole out to the required size, but could, in total, be faster than the two-stage operation that is currently in progress. In either case, [moving the muck](#) from the bottom of the excavation with wheelbarrows, and ensuring that none of it gets stuck as it falls from the machine, are both concerns that will have to be addressed as the work moves forward.



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