



BP Deepwater Oil Spill - the New (and Allegedly "Better") BP Plans - and Open Thread

Posted by [Heading Out](#) on June 15, 2010 - 9:40am

Topic: [Environment/Sustainability](#)

Tags: [deepwater horizon](#), [oil spill](#), [original](#) [[list all tags](#)]

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This post will go through and explain what the letter describes, and I intend, in a later post, to explain in more detail why BP should plan for a steadily increasing volume of oil. Simplistically, it is because the erosion from the sand in the oil continues to widen passages through the reservoir, the casing and lining of the well, and the blow out preventer (BOP).

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For the last 12 hours on June 14th (noon to midnight), approximately 7,800 barrels of oil were collected and 16.8 million cubic feet of natural gas were flared. On June 14th, a total of approximately 15,420 barrels of oil were collected and 33.2 million cubic feet of natural gas were flared.

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This is a reversal of the flow of mud that was used in the [Top Kill option](#) tried earlier. The system

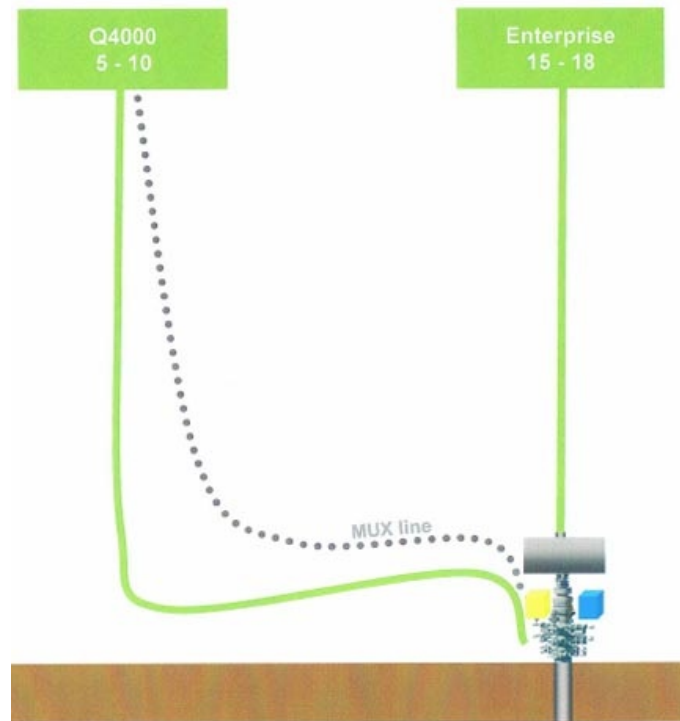
is being tested today, and if it all works, then by tomorrow (Tuesday the 15th) the oil and gas drawn off from the well, will flow up the 3-inch lines to the Q4000 where the oil will be vaporized and burned with the “[Evergreen Burner](#).” Given that this will burn oil in the range from 5 – 13,000 barrels a day (at \$75 a barrel) that is a lot of money (up to \$1 million a day) going up in smoke that could have gone to relief – but that is becoming small change. However a single Burner can only burn 3,000 bd, so it would appear that a multiple mount is being built.



The Schlumberger Evergreen Burner

There are some concerns with this plan. Some of the “junk” pumped into the well might be flushed back out by the oil, into these smaller lines, and block them. The sand in the oil that is eroding the BOP and casing could also erode the choke and kill lines, which are vulnerable, particularly at the couplings and with the hose jumpers. Those concerns will continue until the more permanent risers are installed .

That should bring the capacity of the system up to 28,000 bd. But the continued erosion of the flow paths means that additional provisions should be on hand.

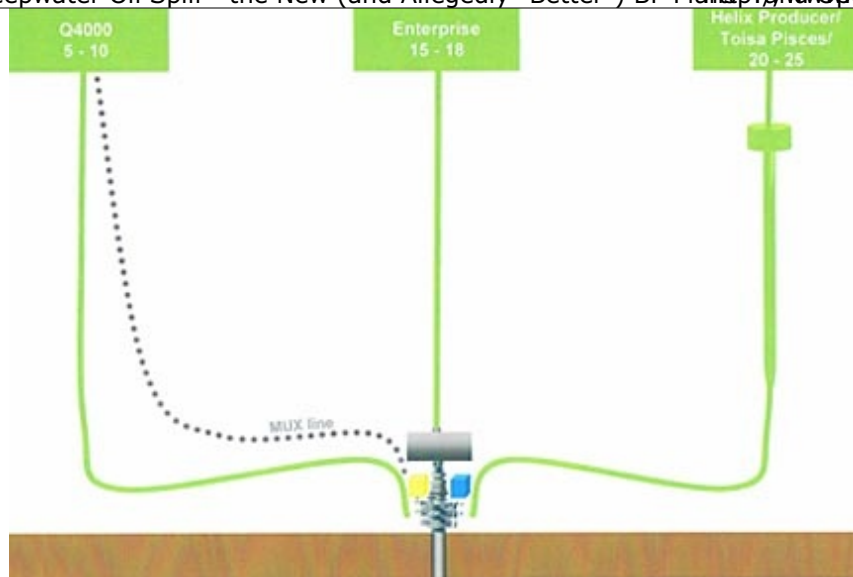


The first increase in capacity – Adding the Q4000 to the collection system

At the end of the month the more permanent riser (for which they just located the suction pile) will be in place. This will allow a more permanent sub-sea system to be installed that will be less vulnerable to Hurricanes. The riser will provide oil to either the Toisa Pisces, or the [Helix Producer](#). This latter is a [Floating Production Unit](#) that is already in the Gulf, but working on the Phoenix field.

As a result of the HPI's involvement in the BP spill response, production from Helix ESG's Phoenix deepwater oil field will be deferred until the HPI comes off hire with BP. Helix ESG expects the financial contribution from the BP HPI contract will offset the financial impact from deferred production of the Phoenix oilfield. The Phoenix oil field, located in the Gulf of Mexico's Green Canyon block 237, is ready to commence production upon HPI's return to the site, with all necessary U.S. Coast Guard and Minerals Management Service permits and approvals in place.

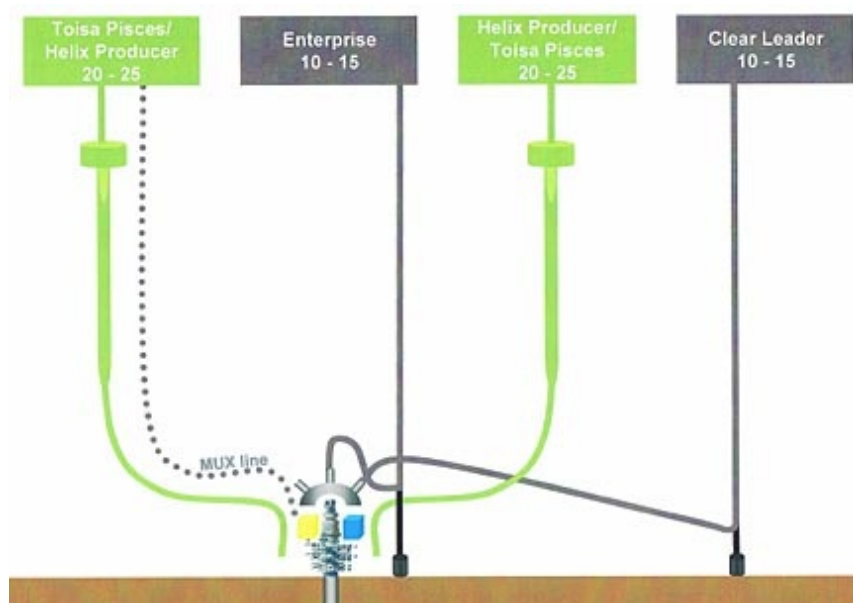
However, the opportunity costs for this additional back-up are only going to become obvious in the longer term.



Step 2 – the second vessel arrives and is connected.

At this point in the process, with a capacity of 53,000 bbl, a day there is still the concern that the well could be producing up to 100,000 bd, and so additional capacity is still required. This will come by now supplying a floating, production, storage, and offloading unit (FPSO) to the site. I had mentioned this [last week](#), at which time BP did not seem to think one was necessary. They have now changed their minds and a vessel (rumored to be [the Seillean](#)) will be released from South America to come to the Gulf. It will take 4-weeks to arrive, and is being brought, in part, to provide insurance in case the Toisa Pisces, or the Helix Producer should have a problem. This can handle some 25,000 bd, and will raise to overall capacity at the site to 80,000 bd.

However the flow paths will be changed, so that the primary vessels receiving oil are the Helix Producer and the Toisa Pisces, which can handle up to 50,000 bd, and the other vessels available (the Enterprise and the [Clear Leader](#), which is a second drillship, – the Q4000 being possibly released) providing additional coverage.



Step 3. The additional flow and storage capacities by mid-July.

It is interesting to note the plans include that the new LMRP cap that will be installed will “ensure a successful relief well kill operation.”

As part of the transition the controls of the feed lines on the BOP, which currently pass through the yellow pod on it, must be transferred to one of the FPSO’s and to back this up, the engineers are now working to resurrect the blue pod on the BOP and make this available.

BP add some caveats to their current plans.

1. Changing the cap could cause problems.
2. It depends how good a seal the new cap gets as to how much oil will be collected.
3. The flow rate is not known, and so the plans are only contingent on the estimates.
4. Leaks will occur whenever the system has to change.
5. They can’t collect oil in the middle of a hurricane.

Now all we have to do is to see if President Obama leaves them with enough cash to pay for all this.



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