



BP's Deepwater Oil Spill - the Relief Well Starts and Miners Watch TV - and Open Thread

Posted by [Heading Out](#) on September 14, 2010 - 8:39am

Topic: [Environment/Sustainability](#)

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Admiral Allen [issued a statement](#) today, in regard to the situation at the Deepwater Horizon well:

After extensive consultation between BP engineers and the federal science team, as well as reviewing data collected from measurements I authorized Friday, the Development Driller III today began the final steps towards the completion of the relief well that will intercept the Macondo 252 well and perform the bottom kill procedure.

This accelerated progress was possible after several discussions between BP and the federal scientists and engineers, leading to the installation of a lock-down device over the weekend, which resulted in the necessary conditions to commence the finalization of the relief well. I will continue to provide updates on the progress of the relief well, the final step that will ensure the well is fully and finally killed, as necessary.

Following this [BP announced](#) that relief well operations re-started.

BP re-started relief well drilling operations from the Development Driller III (DD3) today at 1:40 p.m. CDT following the successful installation of a lock down sleeve, a mechanical device that secures the MC252 well's casing hangar.

The lock-down sleeve was installed on Saturday, and successfully tested – though I am not quite sure what that would entail, since it is a bit like putting a locking nut above the retaining nut on a bolt. It stops the retaining nut from moving – but how to test?

The DDII is continuing to run diagnostic tests on the original well, as the relief well slowly drills forward, [over the last 50 ft](#) to make the intersection. Remember that with the very small target (the unlined section of the borehole annulus), the intent is to drill a short distance, re-survey the location and that of the well (determined from an electro-magnetic field generated in the production casing) to make sure that the well is moving on target, and then drill a little bit more. It will still take some time, perhaps four days, to get to the well. Then there will be the circulation of fluid to determine what is really in the annulus will be one of the last stages, before the well is plugged with cement at the bottom, to fill the annulus above the current levels and provide no potential flow path from the reservoir.

Once that is completed, then the relief well can be also plugged both at the bottom and then at the top, and both wells can start the process of inserting plugs close to the seabed and then removing the wellheads and going through the process of abandoning the wells.

Trapped Miners in Chile

In regard to the miners trapped in Chile, it has now been reported that it may take [as long as 3 hours](#) for each miner to be lifted to the surface, which may make the process last some four days.

The miners have been sent a small tv set, through one of the three 6-inch diameter supply holes already in place, and are now being sent electricity as well as cooler fresh air, to help with the environmental conditions, which are otherwise very hot (88 degF) and humid (85%). And by using U/V lights they are apparently also setting up a day/night cycle for them.

Sadly the mine [is reported](#) to be broke.

. . . sanctions may be hard to enforce. The mining company has filed papers to declare bankruptcy. The company also says it can't pay anything for the rescue effort, not even the wages owed to its miners.

I do remain concerned about water flows underground over that length of time, unless they have some alternate way of getting the water out of the mine, since I presume that the rock falls stopped any pumping operations that were ongoing. For example:

Morning showers require the men to climb aboard a bulldozer-type mining vehicle that rumbles 300 metres up the tunnel to a natural waterfall where they shower, shampoo and clean off the ubiquitous rust-coloured mud.

There is also [another two sets of problems](#), evident from what is generally considered good practice. The first comes from the rescue effort itself:

Another group of men reinforce the mine walls and divert streams of water seeping into their refuge. Several of the drilling and communications tubes connecting the men to the surface use water as lubricant, meaning a constant stream of muddy gunk trickles into their world.

And then there are the other water needs, that are also provided.

After the (Chilean:Ukraine football) match was over, the men prepared to sleep. They walked down the ramp to the bathroom, an area kept constantly clean by a stream of fresh water that washes away the urine and faeces.

All that water has to be going somewhere.

They do monitor the gas content of the air around the refuge, and are preparing for when the big drill first breaks through to the mine with the pilot drill. That is now expected to happen in about 3 weeks, and then the miners will have to start removing the debris from the larger reaming bit as it moves down, enlarging the hole to the required size for the rescue cage. It could be as much as a thousand pounds of rock an hour, though the rates will hopefully and likely be kept slow enough that there is no risk of the pilot hole being jammed with too large pieces of rock.



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