The Oil Drum
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

BP's Deepwater Oil Spill - Matt Simmons on Dylan Ratigan Today, Closing the Relief Ports, and Open Thread 2

Posted by Prof. Goose on June 7, 2010 - 6:44pm
Topic: Environment/Sustainability
Tags: capture rate, deepwater horizon, lmrp, oil spill, original [list all tags]

Matt Simmons has been making claims about other, perhaps larger, problem areas within the structure of the Macondo well--by which even more oil has been pouring into the Gulf of Mexico. We have not seen the evidence to support these claims, even though they have been mentioned in just about every thread we have put up.

Simmons was on with Dylan Ratigan today. That video is shown here in this evening's thread.

We would like to hear what you think--please avoid the conspiracy theory talk and assess the veracity of the claims that Simmons is making from a scientific point of view. We can find no other industry professional making the claims made in this interview, but we wanted to throw it open to the experts that lurk here to hear what the best and brightest thought about this instead of dancing around it--I'd rather have a thread, tear it apart, and put it to bed. So, if these claims need to be debunked, then let's tear them apart on the scientific merits for the record so that folks can disabused of these ideas. So, is the situation MS describes possible/plausible? If so, how? If not, why not?

(Heading Out's post from this morning remains under the fold.)

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(Heading Out's post from this morning remains under the fold.) The rate of oil recovery from the Deepwater well in the Gulf of Mexico has increased from the 6,000 bd recovered on Friday, to some 10,000 bd which was recovered on Saturday.

> On June 5, a total of 10,500 barrels of oil was collected and 22 million standard cubic feet of natural gas was flared.

The closing of one of the ports on the cap is now reported to have increased flow by 600 bd.

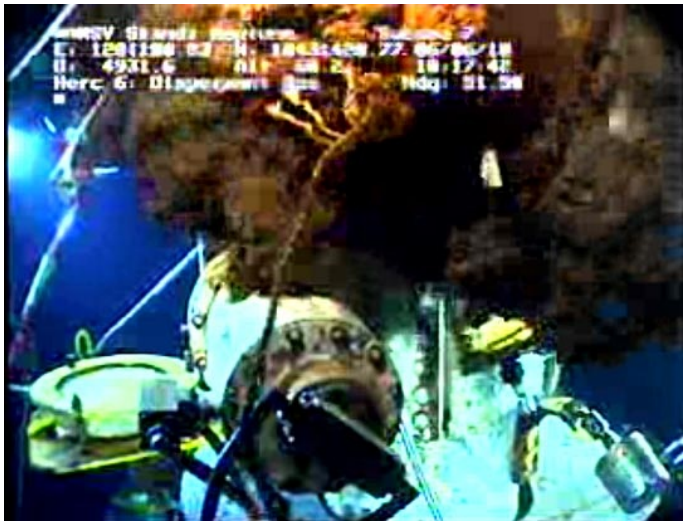
> On June 6, a total of 11,100 barrels of oil was collected and 22 million cubic feet of natural gas was flared. Optimization continues and improvement in oil collection is expected over the next few days.

If all were carrying the same flow (and if of the same size and driving pressure this is a reasonable assumption) then the flow will rise to just over 13,000 bd when all the ports are closed, and there will still be leakage under the cap to be reduced.

Given that the Enterprise can only handle 15,000 bd at most, this is one of the reasons why the ports remain open and that the system to draw off additional oil through the choke and kill lines is being accelerated.

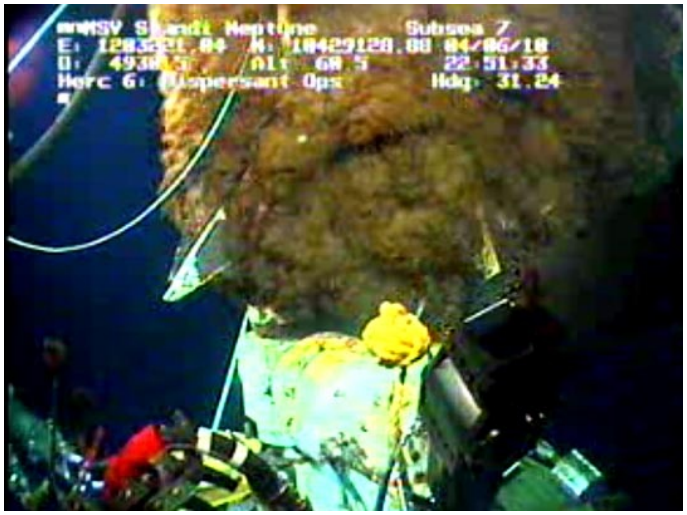
(**Note**: See also BP struggling to process cap-collected mix of oil, seawater, highlighted in Drumbeat.)

This is the current flow (note the white spot in the cloud which is the triangular shape at the bottom of the cap).



Flow at 10 am Sunday

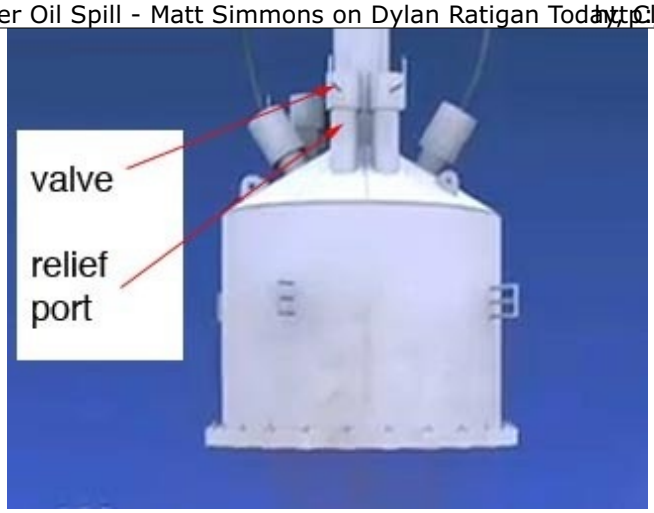
And this was the picture that I posted from the same ROV at the time that the cap was installed



From Skandi ROV 2 10:55 pm 4th June

The triangular elements at the bottom of the cap are more evident. Now the ROV may have moved, but the depth of the cloud beyond the cap is roughly the same, suggesting the same pressure driving it, and if the gap is the same size, then the volume leaving through the base of the cap may well be the same.

The 4,000 bd increase in flow has thus, likely come from the closing of one or more of the relief ports that allowed oil to escape from the top of the cap.



BP illustration of the cap, showing the relief ports with valves

This cap is likely to stay in place for a couple of weeks, until BP can fabricate and install the next step, which will be to reverse the flow of fluid through the choke and kill lines, so that some of the flow can be directed up to the Q4000. This will both help with managing the flow, and also give an alternate path for oil to be recovered, when this first cap is removed.

Update: I had assumed that they had closed most of the ports on the cap to achieve the 10,500 barrels per day flow, but it turns out that so far they have only closed one, and in relation to the numbers at the top of the post, I am not sure when that was done.