RE: Talking points on FRTG Preliminary Summary Report, along with Report

Rodriguez, Julie to: Cesnik, Catherine M, Hines, Vic 06/02/2010 05:54 PM

Cc: "McNutt, Marcia K", "Labson, Victor F" , "Caramanian, Lori", "'Lawrence.E.Greene@uscg.mil'", "Garcia, Martha N", "'Bill.Lehr@noaa.gov'", "Wainman, Barbara W", "Wade, Anne-Berry" , "Ransom, Clarice E", "Moody, Joan F" , "Faeth, Lori"

Hi all,

We are clear to distribute Marcia's transcript from her press call last week and the FRTG summary preliminary report. Both docs will be posted on our website and the JIC will post the summary report on their website shortly.

The bios are FYI unless reporters ask since we're still missing a couple of folks. We will update and send a final list when we have it.

Also, please loop in anyone else I may have left off this e-mail chain.

Thanks all for your patience and help!

Julie

From: Cesnik, Catherine M
Sent: Saturday, May 29, 2010 9:46 PM
To: Rodriguez, Julie; Hines, Vic
Cc: McNutt, Marcia K; Labson, Victor F; Caramanian, Lori; 'Lawrence.E.Greene@uscg.mil'; Garcia, Martha N; 'Bill.Lehr@noaa.gov'; Wainman, Barbara W; Wade, Anne-Berry; Ransom, Clarice E; Moody, Joan F
Subject: Re: Talking points on FRTG Preliminary Summary Report, along with Report

Standing by for the green light for distributing both docs.

Catherine Cesnik
202-579-6023

From: Rodriguez, Julie
To: Hines, Vic; Cesnik, Catherine M
Cc: McNutt, Marcia K; Labson, Victor F; Caramanian, Lori; 'Lawrence.E.Greene@uscg.mil' <Lawrence.E.Greene@uscg.mil>; Garcia, Martha N; 'Bill.Lehr@noaa.gov' <Bill.Lehr@noaa.gov>; Wainman, Barbara W; Wade, Anne-Berry; Ransom, Clarice E; Moody, Joan F
Sent: Sat May 29 21:04:43 2010
Subject: Re: Talking points on FRTG Preliminary Summary Report, along with Report
Hi all,

We need to review the TPs so please consider these draft at this point.

Thanks Vic for circulating!

Julie

From: Vic Hines <vhines@usgs.gov>
To: Cesnik, Catherine M; Rodriguez, Julie
Cc: McNutt, Marcia K; Labson, Victor F; Caramanian, Lori; Lawrence.E.Greene@uscg.mil <Lawrence.E.Greene@uscg.mil>; Hines, Vic; Garcia, Martha N; Bill Lehr <Bill.Lehr@noaa.gov>; Wainman, Barbara W; Wade, Anne-Berry; Ransom, Clarice E; Moody, Joan F
Sent: Sat May 29 20:31:29 2010
Subject: Talking points on FRTG Preliminary Summary Report, along with Report


5.27.10 Press Call w. Marcia.pdf

FRTG Summary_Preliminary_Report.pdf

FRTG short bios.pdf

NWX DEPT OF INTERIOR

Moderator: Julie Rodriguez
May 27, 2010
11:56 am CT

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode. After the presentation we will conduct a question and answer session.

To ask a question you may press star 1. Today's conference is being recorded. If you have any objections you may disconnect at this time. I would now like to turn the meeting over to your host for today's conference, Mr. Frank Quimby. You may begin sir.

Frank Quimby: Good morning. Welcome to the Department of the Interior's media teleconference on the BP oil spill flow rate. The principal speaker today is Dr. Marcia McNutt, Director of the U.S. Geological Survey and Chair of the Flow Rate Technical Group Under the Unified Command for the Federal Response.

Dr. McNutt will make a presentation. Following that there will be an opportunity for questions from the media. Please confine your questions to today's topic because of time limitations. We will begin the presentation with Dr. McNutt's statement.

Marcia McNutt: Good morning. I'm Dr. Marcia McNutt, Director of the U.S. Geological Survey and I serve as Science Advisor to Secretary of the Interior, Ken Salazar.

I just got back late last night from Houston where I was with the Federal Science Team that's overseeing BP's efforts to kill the well. We have been working non-stop to help get the well closed and the BP oil spill under control.

Over the last few days I have also been leading the Flow Rate Technical Group. Admiral Thad Allen convened this group under the Unified Command to develop updated, independent and scientifically grounded estimates of the amount of oil that is flowing into the Gulf from BP's well.

The Flow Rate Technical Group is comprised of federal scientists, independent experts and representatives from universities around the country. It includes representatives from the USGS, NOAA, DOE, the Coast Guard, MMS, the National Labs, the National Institute of Standards and Technology, UC Berkeley, University of Washington, the University of Texas, Purdue University and several other academic institutions.

BP is not involved in our efforts except to supply raw data for our scientists and experts to analyze. Before I talk about the preliminary estimates and the methodology used, I want to be perfectly clear about two points.

First, it's important to understand that since the beginning of this incident the administration's deployments of resources and tactics in response to the oil spill have been based on a worst-case catastrophic scenario.

We have not been constrained by flow rate estimates. The scale of the response would have been the same regardless if it were 1000 barrels a day or 100 times that.

We've made an all-out response, all hands on deck and all possible resources are being made available. Second, I want to emphasize that these numbers are still preliminary.

They're based on new methodologies being employed to understand a highly dynamic in a complex situation. We are still getting more data and we are improving our scientific modeling.

We will continue to refine and update these estimates. One of our teams is still working and will be reporting out in a few weeks. Having made these points, I want to talk now about how we've developed our preliminary estimates.

Within the Flow Rate Technical Group two teams are reporting out today using two entirely independent strategies for estimating the flow of oil into the Gulf.

To develop the preliminary range of values we've combined the range of values from each of the independent methods to find the area of overlap for the most likely flow rate for the well.

This is the most sound scientific approach because measurement of the flow is extremely challenging given the environment, unique nature of the flow, limited visibility and of course lack of direct human access.

The first team, the Mass Balance Team, analyzed how much oil is on the surface of the Gulf of Mexico. The Mass Balance Team developed a range of

values using USGS and NOAA analysis of data that was collected from NASA's Airborne Visible/Infrared Imaging Spectrometer called AVIRIS.

The AVIRIS is an advanced imaging tool loaded on board a NASA airplane. USGS has previously used this AVIRIS tool to discover water on the moon, and this is the first time however that we've used it to measure the volume of an oil spill.

The imaging spectrometer essentially is able to measure the volume and mass of the oil on the surface of the water. Even if it is mixed with other materials such as (dispersent) and water, USGS is able to determine how much of that material is oil.

Based on observations on May 17 and accounting for thin oil not sensed by the AVIRIS sensor, we estimate that between 130,000 and 270,000 barrels of oil are on the surface of the Gulf of Mexico on that date.

To be clear this is not the flow rate but the oil on the surface. This estimate could be of assistance to responders because it gives a sense of how much oil on the surface they are still battling and that could come ashore.

We estimate that in addition to what the AVIRIS measured on the surface as of May 17, a similar volume of oil has already been burned, skimmed, dispersed or evaporated.

Given the amount observed and the adjusted calculations for the amount of oil that was burned, skimmed, dispersed or evaporated the initial estimate from the Mass Balance Team is that the rate of release from the well was between 12,000 to 19,000 barrels of oil per day.

Now this methodology carried several challenges, including the fact that the AVIRIS plane can only fly a portion of the spill in a day, meaning that an assumption had to be made that the area image was representative of the entire spill region.

The second team within the Flow Rate Technical Group reporting out today is the Plume Modeling Team. They used a different methodology. They pursued the approach of observing video of the oil/gas mixture escaping from the kinks in the riser and the end of the riser pipe, using advanced imaging analysis to estimate fluid velocity and flow volume.

This team faced several methodological challenges including having a limited window of data in time to choose from, getting good lighting and unobstructed views of the end of the riser and estimating how much of that flow is oil, gas, hydrates and water.

Based on their analysis, the video observations that the Plume Modeling Team has provided an initial lower bound of the rate of flow between 12,000 to 25,000 barrels of oil per day.

As mentioned earlier the method of each of the teams has its own limitations and biases, and that is why we are quoting the range of values from both of these methods.

What is remarkable is that these two entirely independent methods yielded such similar results. We then reality checked the estimates from both teams with a basic calculation of the lower limit of possible oil that is spilling, which is the amount of oil collected by the riser insertion tube tool, or RITT, plus the estimate of how much oil is escaping the RITT and how much oil is leaking from the kink in the riser.

We know that on May 25, 2010 at approximately 1730 Central Daylight Time the RITT logged oil collection at a rate of 8000 barrels per day as measured by a meter whose calibration was verified by a third party.

Based on observation of the riser the team estimated that at least 10% of the flow was not being captured by the riser at that time. So the lower bound estimate of the flow rate then rises to about 9000 barrels per day.

Adding in the flow from the kink at the riser which is before capture by the RITT, a reasonable low amount on total oil flow is at least 11,000 barrels per day.

Note that this lower bound alone is more than twice the earlier flux estimate of 5000 barrels per day and is independent of any calculations or model assumptions made by either of the teams.

Therefore three methodologies that I have cited today suggest that a lower bound on the flow is 12,000 barrels per day, and two methodologies used by the Flow Rate Technical Group suggest that the flow rate could be as much as 19,000 barrels per day.

I want to emphasize that these numbers are preliminary, based on new methodologies being employed to understand a highly dynamic and complex situation.

As we get more data and improve our scientific modeling in the coming days and weeks ahead, we will continue to refine and update our estimates. Everyone is working diligently to ensure these numbers are peer reviewed.

In coming up with the estimates I'm reporting today, my scientific team pulled all-nighters to come up and be able to report on today and I want to thank them for their very, very hard work.

We are also creating a Web site to ensure this information is available to the public in a timely fashion. And thank you. I'd be happy to take questions.

Coordinator: Thank you. We will now begin the formal question and answer session. If you'd like to ask a question, please press star 1. You will be announced prior to asking your question.

To withdraw your question, please press star 2. Once again to ask a question, please press star 1. One moment please. Our first question comes from Seth Borenstein of the Associated Press. You may ask your question.

Seth Borenstein: Yes thank you Dr. McNutt. First, you mentioned the lower bound of the video team was 12,000 to 25,000 barrels but then later you said there were 19,000.

Can you tell us what the upper bound of the video observation team is? That's the first part of this question. The second part of the question is are you satisfied with the fact - with BP's cooperation in terms of video because some people on the science team have said they are not?

And the third part, the AP has been asking for the names of all the members of your team for a week now and no one has responded. Can you commit publicly to releasing the names of this federal team today? Thank you.

Marcia McNutt: Lots of questions there Seth.

Seth Borenstein: Well if someone answered them when I asked earlier it would be good.

Marcia McNutt: Seth all in good time here. Okay first of all the reason why the Flow Rate Team did not give an upper bound is that the flow goes between a gas phase and an oil phase.

And the - truly a true lower bound might be if it's all gas which would be zero oil, if it went to a completely oil phase which has not actually been observed but could be if they had video that showed it, then it could be higher.

They are looking at more video now which has been supplied by BP and could come up with a higher bound but stay tuned. It may come. But it may not be sustained over a long enough time to truly add up to much.

And that's why it's good to have the estimate from the Mass Balance Team as well because the Mass Balance Team shows that integrated over any length of time what does the average flow rate look like, which is a very meaningful number.

And then you asked about the names of the team members. We will be making that public and so we can post that for you. And that would probably be easier than me reading off the names right now.

Is the team happy with the data they've gotten? Yes, we did have some shakeups in terms of getting the data to the team simply because of the way the ROBs record their data.

The file sizes were too big to FTP but we did find a way that we were able to distribute it and they now have probably more data than they know what to do with.

So I think if you talk to the team members they're probably pretty happy and you can verify that yourself.

Coordinator: Bettina Boxall of L.A. Times, you may ask your question.

Bettina Boxall: The USGS and Coast Guard and the federal authorities have, you know, consistently of course pointed to 5000 barrels and rely heavily on surface observations until now.

Why were the video analyses not employed earlier and why was the federal government so reliant on the surface observations, which clearly could only catch a portion of the spill?

Marcia McNutt: Okay, very good question. Here is the problem with the video data. The video data we knew from the very beginning was going to be dominated by the gas phase.

And until the RITT tool was put into the riser at the bottom of the ocean there was no way to correct how much of that flow was gas. And that was not until the last week and a half that we had that piece of evidence so - and to know that about 75% of what was being seen was actually gas coming out of the bottom.

And so it really was mostly the surface that was telling us more about the release rate, and that's why we're now getting better estimates from the flow because we can correct for the gas phase.

Frank Quimby: Next question.

Coordinator: Melanie Trottman of Wall Street Journal, you may ask your question.

Melanie Trottman: Hello, I - the range, the lower bound rate - is it 12,000 to 19,000 or 12,000 to 25,000?

Marcia McNutt: The reason I quoted 12,000 to 19,000 is that's the overlap of both of those independent estimates. I think that the Plume Team of course came with the 12,000 to 25,000 for their range of estimates.

So of course these are different kinds of estimates. The - those are - the Plume Team is looking at instantaneous rates whereas the Mass Balance Team is looking at integrated data, so they are looking at averages over the first 27 days of the oil spill. So there's slightly different ways of looking at it.

Coordinator: David Mattingly of CNN, you may ask your question.

David Mattingly: Hi, thank you for taking my question. The - what I would like to know is who exactly got that original estimate so wrong and how did they get it wrong?

Marcia McNutt: The original estimate was of course based on very limited data. It was approved by the Unified Command and it was based on limited data that had come in from NOAA.

I - actually before the Flow Rate Technical Group started their work I interviewed many of the people who had been involved in producing that rate just to see what they had come up with.

And to tell you the truth they did have numbers that were kind of ranging from - anywhere from 1000 to 1300 - or 13,000 gallons per day - or 13,000 barrels per day, excuse me.

And they had such wildly different numbers, all based on surface observations that they decided to take a number somewhere in the middle that they thought was conservative but defensible.

And they reserved the right of course to revise it and felt that it was important to convince Thad Allen to stand up this Flow Rate Technical Group to look more closely at it once sufficient information was in hand to improve the number.

Frank Quimby: Next question.

Coordinator: Jordan Burke of Bloomberg News, you may ask your question.

Jordan Burke: Hi there. Thank you for your time. Can you comment on how much it's leaking now or how recent we should be believing this data for for the well?

Marcia McNutt: If you're asking about time dependent of facts, whether the well is flowing a lot less now than it was earlier, the advantage of using these different types of analyses is that the Plume Group believes they'll be able to look at video from different epics and actually look at some time variability.

And they fully intend to do that to see whether they can see whether the rate may have changed in time. Our initial thought from simply looking at the change in pressure at the base of the blowout preventer is that there probably have not been major changes in the flow rate as a function of time.

But that - the one major change that may happen would be now that the riser seems to be failing as a function of this top kill, if that is taken off then the flow rate would change.

Frank Quimby: Next question. We have time for one more because Dr. McNutt has to go to a hearing.

Coordinator: Chris Baltimore of Reuters, you may ask your question.

Chris Baltimore: Thank you very much. Is - can we say now definitively that this spill has eclipsed the Exxon Valdez in terms of its total - the total amount of oil released?

Marcia McNutt: Chris that's - this is obviously a very, very significant environmental disaster and I think with the numbers I've given you, you can vouch for that.

Chris Baltimore: It'd be better if you could.

Frank Quimby: Thank you very much. That concludes our teleconference for today. Appreciate your participation.

END

FRTG Member Bios from the Federal Government (partial list):

Lieutenant Commander Richard Brannon is with the U.S. Coast Guard 8th District Gulf Strike Team. During the response to Hurricane Katrina, he was credited with the successful staging of food and supplies to critical areas, coordinating the multiagency response to over 500 sunken or grounded vessels, and saving the federal government over $1 million by adroitly negotiating service contracts.

Gerald Crawford is a Petroleum Engineer with the Minerals Management Service's Gulf of Mexico regional office. He serves as Lead Engineer for the Reserves Section in resolving issues related to reservoir analyses, reserves inventory, and assignments of new producible leases to fields. He has also authored a report on oil and gas reserves in the Gulf.

Dr. William (Bill) J. Lehr is currently Senior Scientist at the Office of Response and Restoration of the National Oceanic and Atmospheric Administration (NOAA). He was previously Spill Response Group Leader for the same organization, technical analyst with NASA Jet Propulsion Laboratory and held a joint appointment with the Research Institute and Mathematical Science Department at the University of Petroleum and Minerals. Dr. Lehr has also served as an adjunct professor for the World Maritime University and oil spill consultant for UNESCO. Dr. Lehr is a world recognized expert in the field of hazardous chemical spill modeling and remote sensing of oil spills.

Victor F. Labson is the Director of the U.S. Geological Survey's Crustal Geophysics and Geochemistry Science Center in Denver, Colorado. This Science Center employs over 100 geophysicists, geochemists, and related technical and professional staff in earth science research. Dr. Labson's 30-year career with the USGS has been focused on the application of ground and airborne geophysical methods to quantitative imaging of the Earth. His most recent focus has been on the relationship of the chemical and physical properties of the Earth to resultant geophysical phenomena.

Dr. Marcia McNutt is Director of the USGS, and a distinguished scientist and administrator and the first woman director of the USGS in its 130-year history. Dr. McNutt previously served as president and chief executive officer of the Monterey Bay Aquarium Research Institute (MBARI), in Moss Landing, CA.

Don Maclay is a Petroleum Engineer with the MMS' Gulf of Mexico regional office. He provides technical support to the Regional Supervisor in the evaluation of requests relating to the efficient recovery of hydrocarbon resources in the Outer Continental Shelf.

Darren Mollot is the Senior Technical Adviser in the Office of Planning and Environmental Analysis at the Department of Energy. The Office of Planning and Environmental Analysis is housed at the National Energy Technology Laboratory and is tasked with leading the development of the technology performance metrics and forecasting the benefits based on the projected metrics and goals.

William Reese is the Principal Associate Director for Global Security at Los Alamos National Laboratory. Rees' recent assignments include the Science and Technology Policy Institute in Washington, D.C., where he was a fellow and deputy under secretary of defense for Department of Defense (DoD) Laboratories and Basic Sciences, DUSD (LABS).

Franklin Shaffer is a Senior Research Engineer with USDOE National Energy Technology Laboratory. For 25 years he has led the development of new high speed particle image velocimetry (PIV) tools to study particle flow dynamics of energy processes. He has received numerous national and international awards for development of new high speed imaging tools, including the R&D 100 Award and the Federal Laboratory Award for Excellence in Technology Transfer.

FRTG Member Bios from Academia:

Dr. Alberto Aliseda is an Assistant Professor of Mechanical Engineering at the University of Washington. His research and teaching focuses on fluid mechanics with applications to Energy, Enviromental and Biomedical Flows.

Dr. Paul Bommer is a Senior Lecturer in Petroleum Engineering at the University of Texas at Austin. He teaches courses in drilling, production, artificial lift, and facilities. He also spent twenty-five years in private practice, specializing in drilling and production operations and oil and gas appraisals.

Dr. Peter C. Cornillon is a Professor of Physical Oceanography at the University of Rhode Island. His areas of interest range from the large-scale, e.g., subtropical gyre circulation, to the small-scale, e.g., frontal dynamics in the open ocean and on the continental shelf. He has also been working as a satellite oceanographer since 1981.

Dr. Juan C. Lasheras is a Professor in the Department of Mechanical and Aerospace Engineering at the University of California at San Diego. His research interests include turbulent flows, two-phase flows, and bio-medical fluid mechanics, and biomechanics.

Dr. Ira Leifer is an Associate Researcher at the University of California at Santa Barbara. His research projects include a simulation of a subsurface oil spill by a hydrocarbon seep, and an estimate of the release points of oil slicks in the ocean using the natural laboratory of the Santa Barbara Channel.

Dr. James J. Riley is a Professor of Mechanical Engineering at the University of Washington. He is a pioneer in the development and application of direct numerical simulation to transitioning and turbulent flows. His current research emphasizes turbulent, chemically-reacting flows, as well as waves and turbulence in density-stratified flows and rotating flows.

Dr. Omer Savas is a Professor with the Department of Mechanical Engineering at the University of California at Berkeley. His research interests include fluid mechanics, aircraft wake vortices, biofluid mechanics, boundary layers, instrumentation, rotating flows, transient aerodynamics, turbulent flows, and vortex dynamics.

Dr. Steven Wereley is an Associate Professor of Mechanical Engineering at Purdue University. His research interests include biological flows at the cellular level, and electrical and optical manipulation of particles and fluids.

Dr. Poojitha D. Yapa is a Professor of Civil and Environmental Engineering at Clarkson University. His research interests include modeling of deep water oil and gas jets and plumes, modeling of the fate of oil spills and related oil spill processes, and oil shoreline interaction.

Pedro Espina is a Scientific Advisory for the National Institute of Standards and Technology.