



Re: Results from riser cut

Hassan, Basil o mcnutt@usgs.gov

06/10/2010 05:39 PM

Cc: "Hunter, Tom", "Hurst, Kathleen T", "Davies, Peter B", "Hassan, Basil"

Marcia,

Tom Hunter asked me to get back with you concerning the differential pressure measurement and subsequent flow rate calculations. As mentioned below, the team is looking at the best option for getting the pressure measurements, and based on that data, will be able to produced some estimates of the flow rates, with some uncertainty around some parameters. Without the pressure measurements, there will be significant uncertainty in the calculations. Based on a teleconference today, it is hoped that they will have some results in the next 2-3 days.

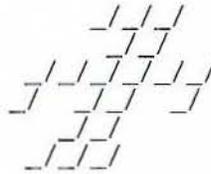
Please let me know if you need anything else.

Regards,

Basil

Basil Hassan, Ph.D.  
Sandia National Laboratories  
Strategic Implementation Dept.

Mail Stop 0127  
P. O. Box 5800  
Albuquerque, NM 87185-0127 USA



Sandia Tech Area I  
Bldg. 802, Room 3011G

Phone: (505) 844-4682  
Cell: (505) 238-4090  
FAX: (505) 844-1218  
bhassan@sandia.gov

**From:** Marcia K McNutt [<mailto:mcnutt@usgs.gov>]

**Sent:** Thursday, June 10, 2010 6:30 AM

**To:** SCHU@hq.doe.gov; Rod.OConnor@hq.doe.gov; Hunter, Tom; majumdar@me.berkeley.edu; david\_hayes@ios.doi.gov; slv@ios.doi.gov

**Subject:** RE: Results from riser cut

OK -

I'll be on the 9 am with you. Ken is otherwise engaged.

**From:** SCHU <SCHU@hq.doe.gov> [<mailto:SCHU> <SCHU@hq.doe.gov>]

**Sent:** Thursday, June 10, 2010 8:29 AM

**To:** "mcnutt@usgs.gov" <mcnutt@usgs.gov>; "OConnor, Rod" <Rod.OConnor@hq.doe.gov>; "Hunter, Tom (Sandia)" <tohunte@sandia.gov>; "majumdar@me.berkeley.edu" <majumdar@me.berkeley.edu>; "david\_hayes@ios.doi.gov" <david\_hayes@ios.doi.gov>; "slv@ios.doi.gov" <slv@ios.doi.gov>

**Subject:** Re: Results from riser cut

Marcia,

We are finalizing and will soon be able to make public the way we calculated the flow increase after the riser was cut.

Still no word on the differential pressure measurement, except they plan to use a surplus (not in use) methanol port, and they have a gauge with 0.1 psi precision.

Ken and I should learn more during the 9 am call.

Steve

**From:** Marcia K McNutt <mcnutt@usgs.gov>  
**To:** SCHU; Hunter, Tom (Sandia)  
**Cc:** OConnor, Rod; Majumdar, Arun; Deanna\_Archuleta@ios.doi.gov <Deanna\_Archuleta@ios.doi.gov>; Anne\_Castle@ios.doi.gov <Anne\_Castle@ios.doi.gov>; Mark K Sogge <mark\_sogge@usgs.gov>; Judy J Nowakowski <jnowakowski@usgs.gov>; Bill.Lehr@noaa.gov <Bill.Lehr@noaa.gov>; Martha N Garcia <mgarcia@usgs.gov>; David\_Hayes@ios.doi.gov <David\_Hayes@ios.doi.gov>; Thad.W.Allen@uscg.dhs.gov <Thad.W.Allen@uscg.dhs.gov>  
**Sent:** Thu Jun 10 08:13:38 2010  
**Subject:** FW: Results from riser cut

Steve, Tom, Rod:

Please see message below from David Hayes. The Plume Team worked through the night to come up with a post-riser-cut assessment of the new flow rate, but has encountered two set-backs that mean that they are not fully ready to reach a team consensus today (see note below from team leader Bill Lehr of NOAA).

(1) The server is challenged to meet the needs of pushing the data to all team members simultaneously while also getting the data mirrored to the DOE site such that it is accessible publicly. All along with this amount of high-res data we have been pushed up against bandwidth issues.

(2) The team had not anticipated the added complexity of interpreting the data with the ROV hovering in the water column during the observations. All previous observations of the plume pre-cut had the ROV fixed on the seafloor. In order to get a good viewing angle of the top of the LMRP, the ROV had to be off the seafloor, and it is a far less stable situation.

David Hayes has suggested that we coordinate on a time line such that we can make sure that any results from your differential pressure measurements can be factored in as well. Any update? Bill thinks that the Plume Team will be done 9 am tomorrow.

Marcia

**From:** Hayes, David <David\_Hayes@ios.doi.gov> [[mailto:Hayes, David <David\\_Hayes@ios.doi.gov>](mailto:Hayes, David <David_Hayes@ios.doi.gov>)]  
**Sent:** Thursday, June 10, 2010 7:40 AM  
**To:** "McNutt, Marcia K" <mcnutt@usgs.gov>; "Lee-Ashley, Matt" <Matt\_Lee-Ashley@ios.doi.gov>; "Castle, Anne" <Anne\_Castle@ios.doi.gov>; "Archuleta, Deanna" <Deanna\_Archuleta@ios.doi.gov>  
**Cc:** "Nowakowski, Judy J" <jnowakowski@usgs.gov>; "Sogge, Mark K" <mark\_sogge@usgs.gov>; "Garcia, Martha N" <mgarcia@usgs.gov>  
**Subject:** RE: Results from riser cut

Marcia:

Thanks to you and your team for trying so hard. Let's give them a break, and let them take the time that they need.

It actually would be helpful to see if we can identify a report-out date for the group that is the same time as the report-out for DOE's pressure data-based flow estimate. Could you coordinate with Steven Chu's group on that and then target a report-out that is coordinated with theirs?

David

**From:** Marcia K McNutt [<mailto:mcnutt@usgs.gov>]  
**Sent:** Thursday, June 10, 2010 6:20 AM  
**To:** Lee-Ashley, Matt; Hayes, David; Castle, Anne; Archuleta, Deanna  
**Cc:** Nowakowski, Judy J; Sogge, Mark K; Garcia, Martha N

**Subject:** Results from riser cut

Please let me know how you'd like to proceed. They have tried as hard as they could. But with the server moving videos to DOE, trying to serve them up to the team, and other challenges, it was just too slow.

Marcia

**From:** Bill.Lehr@noaa.gov [<mailto:Bill.Lehr@noaa.gov>]

**Sent:** Thursday, June 10, 2010 1:18 AM

**To:** Marcia K McNutt <[mcnutt@usgs.gov](mailto:mcnutt@usgs.gov)>

**Subject:** Re: FW: Latest version

Marcia,

Because of demands on our ftp site by other agencies (e.g. DOE is downloading all the latest videos from the latest hard-drive) the Team is having difficulties looking at all the videos. Steve has pointed out the additional complication of the moving ROV.

Status as of now:

Juan - finished his calculations

U. of Wash - Were doing final checks

Steve - not ready

Frank-not ready

Ira -not ready

Omer - I don't know

Paul, me, Pooji - did not use PIV method

Antonio, Pedro - statisticians who do analysis on results

My suggested statement if DOI really needs something by 0900 hrs tomorrow

The Plume Team is still analyzing the new videos that were only available to the Team late on June 9. Preliminary results from some of the Team members suggest little change in the net flow after the riser cut. However, this may not be consistent with the results of other members who are still doing their analysis. The results of the leak rate analysis for the time period prior to the RITT insertion is given below.