2041324898-15479-16896-135-153 From: Marcia K McNutt <mcnutt@usgs.gov> Sent: Wed, 4 Aug 2010 16:18:11 To: GS FOIA 0105 <foia0105@usgs.gov> Subject: Fw: videos of flow out stacking cap

\*\*\*\*

Dr. Marcia McNutt

Director

US Geological Survey

12201 Sunrise Valley Drive, MS 100

Reston, VA 20192

(703) 648-7411

(703) 648-4454 (fax)

(571) 296-6730 (cell)

mcnutt@usgs.gov

www.usgs.gov

\*\*\*\*\*

----- Forwarded by Janet N Arneson/DO/USGS/DOI on 08/04/2010 04:17 PM -----

From: Marcia K McNutt/DO/USGS/DOI

To: wereley@purdue.edu

Cc: Bill.Lehr@noaa.gov, Mark K Sogge/DO/USGS/DOI

Date: 07/30/2010 07:07 PM

Subject: RE: videos of flow out stacking cap

Steve- I am not sure what it will take to get the videos. I am not even in Houston this weekend, but I will certainly get the Houston team on it!

www.usgs.gov

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSGS

From: Wereley, Steven T. <wereley@purdue.edu> [mailto:Wereley, Steven T. <wereley@purdue.edu>] Sent: Friday, July 30, 2010 5:49 PM To: Marcia K McNutt <mcnutt@usgs.gov>; "Bill.Lehr@noaa.gov" <Bill.Lehr@noaa.gov> Subject: RE: videos of flow out stacking cap

If we get new videos soon I could take a look at them this weekend. Some of the other plume team members probably could as well...

Steve Wereley, Professor of Mechanical Engineering Birck Nanotechnology Center, Room 2019, 1205 West State Street Purdue University West Lafayette, IN 47907 phone: 765/494-5624, fax: 765/494-0539 web page: http://engineering.purdue.edu/~wereley

From: Marcia K McNutt [mailto:mcnutt@usgs.gov] Sent: Friday, July 30, 2010 5:47 PM To: Bill.Lehr@noaa.gov Cc: Wereley, Steven T. Subject: RE: videos of flow out stacking cap

I agree completely. It seems that the teams that had to model the flow are making a lot of assumptions of parts of the system they can't see. It is really only the Plume team, the WHOI guys, and the final choke closing that really can say anything that is concrete and believable.

Marcia



www.usgs.gov

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGS

From: Bill Lehr <Bill.Lehr@noaa.gov> [mailto:Bill Lehr <Bill.Lehr@noaa.gov>] Sent: Friday, July 30, 2010 3:22 PM To: Marcia K McNutt <mcnutt@usgs.gov> Cc: wereley@purdue.edu Subject: Re: videos of flow out stacking cap However, listening to the reservoir and nodal groups, even measurements with medium-quality video would provide more defensible numbers than guessing the flow conduit, permeability, BOP impedence etc...

# On 7/30/10 12:03 PM, Marcia K McNutt wrote:

I should mention that NO specific hi res videos had been scheduled on the ROVs for the very opportunistic brief period of time to observe the flow that openned up when the capping stack was installed. So Art and I will have to go back and see what is available. It is probably not going to be anything like what you have used before in terms of a real survey of the plume, so whether it will be useful is the question.

Marcia

(703) 648-7411 (office) (703) 648-4454 (fax)

(571) 296-6730 (bb)

(cell)

www.usgs.gov

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSGSUSGS

From: Wereley, Steven T. <wereley@purdue.edu> [mailto:Wereley, Steven T. <wereley@purdue.edu>] Sent: Friday, July 30, 2010 2:51 PM To: "Bill.Lehr@noaa.gov" <Bill.Lehr@noaa.gov>; Marcia K McNutt <mcnutt@usgs.gov> Subject: videos of flow out stacking cap Hi Marcia and Bill. The issue that Arthur Ratzel brought up about the availability of videos from the period after the stacking cap was installed and before the valves were closed is a very good suggestion. If we could get those videos we could cut down the uncertainties on our measurements significantly. We wouldn't have a mangled orifice and we wouldn't have two drill pipes stuck in the riser. Our uncertainty would be limited to almost exclusively the ratio of speed between the outer structures and the average jet speed. I think some members of the group would be interested in these videos and would re-run their analyses on the new images. I know I would. Best, Steve Wereley, Professor of Mechanical Engineering Birck Nanotechnology Center, Room 2019, 1205 West State Street Purdue University West Lafayette, IN 47907 phone: 765/494-5624, fax: 765/494-0539 web page: http://engineering.purdue.edu/~wereley

Page 5