

3154899827-14371-16732-134-86

From: Marcia K McNutt <mcnutt@usgs.gov>  
Sent: Wed, 4 Aug 2010 16:18:32  
To: GS FOIA 0105 <foia0105@usgs.gov>  
Subject: Fw: lmrp cap off

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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

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----- Forwarded by Janet N Arneson/DO/USGS/DOI on 08/04/2010 04:18 PM -----

From: Marcia K McNutt/DO/USGS/DOI

To: wereley@purdue.edu, Bill.Lehr@noaa.gov, pcornillon@me.com,  
rjadrian@asu.edu, Yasuo.Onishi@pnl.gov, Edward.D.Cokelet@noaa.gov,  
ORR.Helpdesk@noaa.gov

Cc: rileyj@u.washington.edu, lasher@ucsd.edu, aaliseda@u.washington.edu,  
pedro.espina@nist.gov, antonio.possolo@nist.gov,  
ira.leifer@bubbleology.com, pdy@clarkson.edu,  
pmbommer@mail.utexas.edu, Franklin.Shaffer@NETL.DOE.GOV, mark\_sogge@usgs.gov,

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savas@newton.berkeley.edu

Date: 06/23/2010 01:39 PM

Subject: RE: lmrp cap off

I saw your note about the flow from the well. Here is what happened just so that no one is overly concerned.

The crew on the Enterprise noted that a fluid started bubbling up on the riser (turns out that it was seawater). They were concerned that it might be a sign that the riser was developing hydrates. Therefore, for safety, they initiated a shutdown of production and moved off site, taking the top cap off the LMRP as the riser moved off site. On inspection, it turns out that all that had happened was that a seawater egress port had become closed at the base of the riser such that seawater couldn't vent as it was supposed to, so had to circulate back up the riser. The safety shutdown occurred as it was supposed to. Closing of the port likely happened through an inadvertant collision with an ROV, but in might have happened any time within the last few days as the rate of seawater flow is currently quite low.

The decision is currently being made whether to put cap #4 back on (pulling

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it off led to hydrates forming which will have to be removed), or whether to install the alternative top cap #10 which is currently on the deck of the ship and ready to go. Either choice will result in some hours of delay in resuming production.

Marcia

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Dr. Marcia K. McNutt  
Director, U.S. Geological Survey  
12201 Sunrise Valley Drive MS 100  
Reston, VA 20192  
(703) 648-7411 (office)  
(703) 648-4454 (fax)  
(571) 296-6730 (bb)  
(831) 915-4699 (cell)  
[www.usgs.gov](http://www.usgs.gov)

USGSUSGSUSGSUSGSUSGSUSGSUSGSUSSSGSUSGS

From: Wereley, Steven T. <wereley@purdue.edu> [mailto:Wereley, Steven T. <wereley@purdue.edu>]  
Sent: Wednesday, June 23, 2010 1:33 PM  
To: "Wereley, Steven T." <wereley@purdue.edu>; "Bill.Lehr@noaa.gov" <Bill.Lehr@noaa.gov>; Peter Cornillon <pcornillon@me.com>; "Ad >> Ronald Adrian" <rjadrian@asu.edu>; "Onishi, Yasuo" <Yasuo.Onishi@pnl.gov>; "E. D. (Ned) Cokelet" <Edward.D.Cokelet@noaa.gov>; \_NOS ORR Help Desk <ORR.Helpdesk@noaa.gov>  
Cc: James J Riley <rileyj@u.washington.edu>; Juan Lasheras <lasheras@ucsd.edu>; Alberto Aliseda <aaliseda@u.washington.edu>; "Espina, Pedro I." <pedro.espina@nist.gov>; "Possolo, Antonio" <antonio.possolo@nist.gov>; ira leifer <ira.leifer@bubbleology.com>;

3154899827-14371-16732-134-86

Poojitha Yapa <pdy@clarkson.edu>; Paul Bommer <pmbommer@mail.utexas.edu>;  
Franklin Shaffer <Franklin.Shaffer@NETL.DOE.GOV>; Marcia K McNutt  
<mcnutt@usgs.gov>; Mark K Sogge <mark\_sogge@usgs.gov>;  
"savas@newton.berkeley.edu" <savas@newton.berkeley.edu>  
Subject: lmrp cap off

Hi again--sorry to disturb again. For those of you with an interest, the LMRP cap was dislodged and possibly damaged this morning by an ROV collision. The cap has been removed and Skandi ROV2 has been keeping an eye on the unrestricted flow out of the BOP. One interesting thing to note is that the ROV seems to be clamped onto the BOP because there is zero relative motion between the ROV and the BOP. This would be perfect for running an ensemble of 1000 or 10000 images through our PIV codes... Maybe we should request video from this time frame and ROV in case we need to revisit the flow issue--or maybe I should quit messing around with this oil spill and get back to my day job...

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>

-----Original Message-----

From: Wereley, Steven T.  
Sent: Wednesday, June 23, 2010 1:25 PM  
To: 'Bill.Lehr@noaa.gov'; Peter Cornillon; Ad >> Ronald Adrian; Onishi,

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Yasuo; E. D. (Ned) Cokélet; \_NOS ORR Help Desk

Cc: James J Riley; Juan Lasheras; Alberto Aliseda; Espina, Pedro I.;  
Possolo, Antonio; ira leifer; Poojitha Yapa; Paul Bommer; Franklin Shaffer;  
Marcia K McNutt; Mark K Sogge; savas@newton.berkeley.edu  
Subject: calculation methodology to account compressibility of oil

Hi all. Ian MacDonald from Florida State has been trying to get a handle on methane emissions lately. I've attached an email string showing correspondence between him, Tad Patzek of Univ. Texas and Mandy Jove of NOAA. From the interchange I'm wondering if we took into account dissolution of gas twice, once in the 0.29 oil volume to total volume ratio and once in the 1.35 volume change factor. It seems that the volume change may be due to dissolution of gas and not to actual density change of the liquid phase.

They copied Paul Bommer on their last email so maybe he can shed some light on this question...

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>