

878081369-40485-16896-146-27

From: Marcia K McNutt <mcnutt@usgs.gov>
Sent: Wed, 4 Aug 2010 15:08:37
To: GS FOIA 0105 <foia0105@usgs.gov>
Subject: Fw: PIV analysis movie of pipe kink jet on FTP

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----- Forwarded by Janet N Arneson/DO/USGS/DOI on 08/04/2010 03:08 PM -----

From: "wereley, Steven T." <wereley@purdue.edu>

To: Franklin Shaffer <Franklin.Shaffer@NETL.DOE.GOV>, "Bill.Lehr@noaa.gov" <Bill.Lehr@noaa.gov>

Cc: "'ira leifer'" <ira.leifer@bubbleology.com>, "pete@gso.uri.edu" <pete@gso.uri.edu>, "'Paul Bommer'" <pmbommer@mail.utexas.edu>, "Savas@newton.berkeley.edu" <Savas@newton.berkeley.edu>, "Pedro I.' Espina" <pedro.espina@nist.gov>, "'Alberto Aliseda'" <aaliseda@u.washington.edu>, "'James J Riley'" <rileyj@u.washington.edu>, Juan Lasheras <lasheras@ucsd.edu>, "'Marcia K McNutt'"

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<mcnuttt@usgs.gov>

Date: 05/26/2010 12:09 PM

Subject: RE: PIV analysis movie of pipe kink jet on FTP

My updated report is attached. To skip to the nitty gritty, I calculate a flow out of the riser of 84423 bbl/day and out of ONE of the kink leaks of 2814 bbl/day. That kink flow rate seems low but it could be that I chose a slow flow time period. Anyhow, take a look and see what you think. The details are in the presentation and follow my preliminary measurements.

Best,

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

878081369-40485-16896-146-27

From: Franklin Shaffer [mailto:Franklin.Shaffer@NETL.DOE.GOV]

Sent: Wednesday, May 26, 2010 11:27 AM

To: Bill.Lehr@noaa.gov; Wereley, Steven T.

Cc: 'ira leifer'; pete@gso.uri.edu; 'Paul Bommer';

Savas@newton.berkeley.edu; Pedro I.' 'Espina; 'Alberto Aliseda'; 'James J Riley'; Juan Lasheras; 'Marcia K McNutt'

Subject: PIV analysis movie of pipe kink jet on FTP

Importance: High

**** High Priority ****

I am getting good preliminary PIV results for the plume jet emitting from the pipe kink.

BP claims that the flow rate cannot be measured from the videos of the oil leak jets. But seeing is believing. So I made a movie of my PIV analysis overlain on top of the original BP video. Perhaps videos like this will help with the credibility of our PIV analyses.

I uploaded the movie of the my PIV analysis to NOAA's Deepwater Horizon FTP site. It's in a the "/Videos/PIV_Movies/" subfolder. But I have had trouble playing the movie after I download it from NOAA's FTP site. I don't know why. So I also posted the file (in three different formats) on my own FTP site. You can also download the movie by using the following link in a web browser. Just right click and save one of the files to your hard drive:

<ftp://imagej%40highspeedparticleimaging.info:Analysis@highspeedparticleimaging.info>

If such videos are useful, I can create another one for the main riser plume. But there's not much time...

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Frank

ps: if you cannot download and play the movie, please let me know ASAP.

(See attached file: 2010_DeepwaterHorizons_wereley.pptx)