

1916758884-33837-16528-191-247

From: Marcia K McNutt <mcnutt@usgs.gov>
Sent: Wed, 4 Aug 2010 15:16:55
To: GS FOIA 0105 <foia0105@usgs.gov>
Subject: Fw: new riser video

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----- Forwarded by Janet N Arneson/DO/USGS/DOI on 08/04/2010 03:16 PM -----

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

To: ira.leifer@bubbleology.com, Franklin.Shaffer@NETL.DOE.GOV

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Date: 06/08/2010 02:17 PM

Subject: new riser video

Hi all. I've just taken a look at the new riser video. It's not bad. One problem is that the ROV keeps moving during the movie but we should be able to estimate the flow rate nonetheless because the video includes a number of different viewing angles and magnifications...

Best,

Steve Wereley, Professor of Mechanical Engineering
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-----Original Message-----

From: ira leifer [mailto:ira.leifer@bubbleology.com]

Sent: Tuesday, June 08, 2010 11:40 AM

To: Franklin Shaffer

Cc: Poojitha Yapa; Paul Bommer; savas@newton.berkeley.edu; Antonio Possolo;

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Pedro I. Espina; Bill.Lehr@noaa.gov; Wereley, Steven T.; Alberto Aliseda;
James J Riley; Juan Lasheras; Mark K Sogge; Marcia K McNutt
Subject: Re: Pooling Expert Assessments

Antonio,

I have 20 years of hourly data from the hydrocarbon seeps, which we submitted for publication in *Atm Environments* - a seep field which is migration through a complex fractured, faulted reservoir system to the seabed and searface and thus represents the subsurface migration processes to the pipe (also just published a study relating spatial variability to structural geology, and working on on on the a manuscript on the relationship between geologic structure and temporal emission variability).

I am happy to share that data, it illustrates how these type of systems (hc migration) behave, which has greater similarity to a geyser system than a river flow. To use the analogy.

I have attached the manuscript for anyone who is interested, however, for those who are very busy (everyone!!) there are a number of very pretty and highly meaningful figures.

warmest regards,

Ira