2270985745-31357-16489-148-252

From: Marcia K McNutt <mcnutt@usgs.gov>
Sent: Wed, 4 Aug 2010 15:16:23
To: GS FOIA 0105 <foia0105@usgs.gov>
Subject: Fw: sample conclusion template

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----- Forwarded by Janet N Arneson/DO/USGS/DOI on 08/04/2010 03:15 PM -----

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Date: 06/07/2010 04:16 PM

Subject: RE: sample conclusion template

Hi all. Take a look at the movie 20100512153402296@H14_Ch1-H264h.mov. About 20 minutes in you can see oil escaping out the back of the pipe (as defined from the view we've all been looking at).

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From: ira leifer [mailto:ira.leifer@bubbleology.com]
Sent: Monday, June 07, 2010 2:54 PM
To: Bill.Lehr@noaa.gov
Cc: antonio.possolo@nist.gov; James J Riley; savas@newton.berkeley.edu; Alberto Aliseda; Juan Lasheras; Poojitha Yapa; Wereley, Steven T.; Espina,

Pedro I.; Franklin Shaffer; Paul Bommer; Mark K Sogge; Marcia K McNutt; Chris Barker

Subject: Re: sample conclusion template

I apologize in advance, my detailed analysis is not finished, so I include here my preliminary analysis, I will refine into a more detailed report in the next few days. Bottom line - 20 000 - 30 000 bbl/day from the riser - I did not work on the kink. My number one comment is that this was not science - this was a case of many many hand waving assumptions which are not based on studies or data. This pipe flow is a mixture of oil/gas, hydrate chunks, paraffins, oily bubbles, and oily droplets at hydrate depths, in the acceleration phase.

I consider this estimate a discussion point.