

From: Wood, Douglas G
Sent: Tue May 18 00:35:06 2010
To: Hill, Trevor
Cc: Lockett, Tim
Subject: RE: Pressure build-up
Importance: Normal
Attachments: image001.jpg

Trevor

I spent some time in a review of the kill option today with the third parties and then had a 1:2:1 with Ole afterwards.

He has worked up a number of scenarios which he has presented. Tim's points are both valid and have an impact on the viability of the kill option working.

Kate and I have passed our thoughts on the probability of success and the risks that may be introduced to Paul.

Doug Wood
Skarv Subsea Manager
Office: +47 229 46621
Mobile: [REDACTED]

From: Hill, Trevor
Sent: 18 May 2010 00:15
To: Wood, Douglas G
Subject: FW: Pressure build-up

Doug

Please see point 1 as you interface with kill team...

Regards
Trevor

From: Lockett, Tim
Sent: 17 May 2010 23:00
To: Hill, Trevor
Subject: RE: Pressure build-up

Trevor

I have yet to review the ppt files from Ole. I am off-site tomorrow but be in on Wednesday to meet up.

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My thoughts (based on the covering email):

1) The apparent reliance in Ole's email on the 5 mbd number, which has little if no origin, is concerning. From all the different ways we have looked at flowrate, 5 mbd would appear to err on the low side. I will therefore be looking to see that the dynamic well kill modelling has been tested at higher well rates. If this hasn't been done, yet, then could you initiate this with Ole.

2) Maybe I am being pessimistic but my first thought when I heard of the fall in pressure upstream of the BOP is that this is bad news rather than good, my thought would go to reduced restriction within the BOP. The insertion of the insertion pipe has increased back-pressure at the kink - we should have seen an increase in pressure transmitted back to the upstream side of the BOP.

Tim

From: Hill, Trevor
Sent: 17 May 2010 15:31
To: Lockett, Tim
Subject: FW: Pressure build-up

From: Ole B. Rygg [mailto:Ole.Rygg@addenergy.no]
Sent: 16 May 2010 17:26
To: Hill, Trevor
Cc: Mix, Kurt; Thomas Selbekk
Subject: RE: Pressure build-up

Hi Trevor,

I have not yet, completed a report on all the findings due to the time constraints, but have instead included my findings in power point presentations.

Please find two of those enclosed.

As you can see (shut-in presentation), the last reduction in pressure drop at the wellhead (Yesterday), will give more gas in the well and an increased gas cushion during shut-in. UNLESS, the reduction in wellhead pressure is due to an increased flow rate and the restrictions at the wellhead is giving away. This means a large hole in the BOP stack an less chance of ever being able to do a dynamic top kill, since the required rate through the stack to achieve the required pressure drop is to high.

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Be aware that we are working on the 5000 bopd case. That could be too optimistic.

I am currently working on bullheading modelling for the top kill option.

Please give me a call if you want to discuss. I have a local cell phone number: [REDACTED]

Regards, Ole

cid: [REDACTED]

Dr. Ole B. Rygg

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From: Mix, Kurt [mailto:Kurt.Mix@bp.com]
Sent: 16. mai 2010 17:48
To: Hill, Trevor
Cc: Ole B. Rygg
Subject: RE: Pressure build-up

Please include Trevor on the distribution of the latest modeling done on the current measured wellhead pressures. Kurt

From: Hill, Trevor
Sent: Friday, May 14, 2010 8:45 AM
To: Mix, Kurt
Subject: Pressure build-up
Kurt

After the discussions yesterday I am keen to see any report produced by Ole Rygg on the flow

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modeling and pressure build-up please. I am happy to ask him directly, but wanted to check with you first.

Regards

Trevor

Trevor Hill

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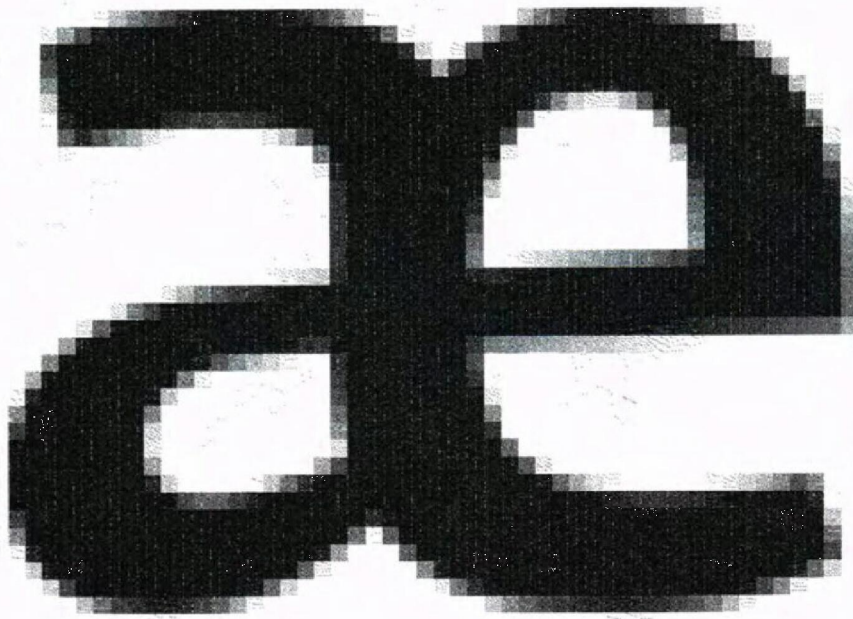
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