



From: Lockett, Tim
Sent: Mon May 03 17:18:07 2010
To: Hill, Trevor
Subject: Best estimate
Importance: Normal
Attachments: Flow estimation.ZIP

Trevor

Some of the data from Ian's model has been updated (fluid model, completion below the end of the drill string) so I re-ran the cases to generate the attached xls which then uses that data to give a flowrate estimate as a function of pressure at the BOP, temperature at the BOP and D/s of the crimp, and velocity of either liquid or mixed phase in the riser - which is currently 19.5 inch ID in the model.

<< >>

- The velocity is very dependent on the riser ID being correct, and the hold-up, but is probably the best line of estimation if we can measure the transport of a dispersion pulse and get gamma to clarify the hold-up.
- The temperature is dependent on the U-value assumed for the tubing.

- The velocity is very dependent on the riser ID being correct, and the hold-up, but is probably the best line of estimation if we can measure the transport of a dispersion pulse and get gamma to clarify the hold-up.

DPT Subsea and Floating Systems
BP Exploration Operating Co Ltd
Chertsey Road, Sunbury-on-Thames, Middlesex, TW16 7JN, United Kingdom

Phone: +44 (0)1932 751804
Mobile: +44 (0)7923 234337
Fax: +44 (0)1932 761666

Email: tim.lockett@bp.com

BP Exploration Operating Company Limited, a company registered in England and Wales with the company number 305943 and whose registered office is Chertsey Road, Sunbury on Thames, Middlesex, TW16 7JN.

This communication contains information from BP p.l.c. and/or its affiliates and is intended only for the personal and confidential use of the addressee(s) named above. This communication may be an attorney-client communication and/or work product and as such is privileged and confidential. If the reader of this message is not the intended addressee(s), you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by return E-Mail or FAX, as the case may be, and delete or destroy the original communication.

CONFIDENTIAL

BP-HZN-2179MDL06523495

BPD411-048253

TREX 009446.0001



From: Lockett, Tim
Sent: Mon May 03 17:18:07 2010
To: Hill, Trevor
Subject: Best estimate
Importance: Normal
Attachments: Flow estimation.ZIP

Trevor

Some of the data from Ian's model has been updated (fluid model, completion below the end of the drill string) so I re-ran the cases to generate the attached xls which then uses that data to give a flowrate estimate as a function of pressure at the BOP, temperature at the BOP and D/s of the crimp, and velocity of either liquid or mixed phase in the riser - which is currently 19.5 inch ID in the model.

<< >>

- The velocity is very dependent on the riser ID being correct, and the hold-up, but is probably the best line of estimation if we can measure the transport of a dispersion pulse and get gamma to clarify the hold-up.
- The temperature is dependent on the U-value assumed for the tubing.

- The velocity is very dependent on the riser ID being correct, and the hold-up, but is probably the best line of estimation if we can measure the transport of a dispersion pulse and get gamma to clarify the hold-up.

DPT Subsea and Floating Systems
BP Exploration Operating Co Ltd
Chertsey Road, Sunbury-on-Thames, Middlesex, TW16 7JN, United Kingdom

Phone: +44 (0)1932 751804
Mobile: +44 (0)7923 234337
Fax: +44 (0)1932 761666

Email: tim.lockett@bp.com

BP Exploration Operating Company Limited, a company registered in England and Wales with the company number 305943 and whose registered office is Chertsey Road, Sunbury on Thames, Middlesex, TW16 7JN.

This communication contains information from BP p.l.c. and/or its affiliates and is intended only for the personal and confidential use of the addressee(s) named above. This communication may be an attorney-client communication and/or work product and as such is privileged and confidential. If the reader of this message is not the intended addressee(s), you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by return E-Mail or FAX, as the case may be, and delete or destroy the original communication.

CONFIDENTIAL

BP-HZN-2179MDL06523495

BPD411-048253

TREX 009446.0001