



Macaé, February 13th 2015

MINUTES OF IADC-BRAZIL OPERATIONAL TECHNICAL COMMITTEE MEETING

HELD ON FEB 10th 2015 10:00 TO 12:00 AT TRANSOCEAN'S OFFICE IN MACAE AND VIDEO CONFERENCE WITH SEADRILL'S OFFICE IN RIO DE JANEIRO.

Present at this meeting were the following:

- Bruno Manfredini - Transocean (Macaé)
- Lane Romine - Transocean (Macaé)
- André Madaleno – QGOG (Macaé)
- Tony Cox - IADC (Macaé)
- Martin Nuttall – Transocean (Macaé)
- John Guy – IADC (Macaé)
- Thaísa Aleixo – IADC (Macaé)
- Mauricio Aguiar - Seadrill (Rio)
- Marcelo Pombo – Seadrill (Rio)
- SaintClair Guedes – Seadrill (Rio)
- Rogério Furtado -Odfjell Drilling (Rio)

The agenda for this meeting was displayed on the screen. The focus was to achieve results and meet the Operational and Technical purposes

- **2015 Goals**
 1. Managed Pressure Drilling – Procedures
 2. Standard Equipment List for ANP – Proposal
 3. Well Control Equipment – Reliability
- Align Committee's expectations
- Discuss Technical Presentations for the upcoming IADC Chapter meetings
- Establish responsibilities
- Discuss participation in Corporate Committees

With regards to the 2015 goals, The following people were clarified as the focal point for each one:

1. MPD - Mauricio Aguiar
2. Standard Equipment List for ANP - Bruno Manfredini
3. Well Control Equipment - Lane Romine and Bruno Manfredini

The following items were agreed upon

- Brazil update to IADC Standard equipment list. A common template consisting of information regarding drilling equipment to be designed to share information between drilling contractors. Lane has agreed to move forward with this and it was proposed that Marcio be asked to assist.
- To align the committee's expectations, 3 technical presentations will be shown per meeting. The presentations are to consist of a 20 minute presentation plus 5 minutes for Q&A.
- It was suggested and agreed that Petrobras should be asked to make a presentation about the complete facilities available through the Sondopolis program
- The 3 first presentations for the 26th of February in Rio de Janeiro were agreed by the Committee and are waiting on Marcio Martin's approval, they are as follows:
 1. EDS Competency - Blade Offshore (Charlie Pomphrey)
 2. Vibrations Analysis – NaproServ (Lenny – Lane coordinating)
 3. Embraer BOP Reliability Project – Petrobras (Borella / Petrobras to present)
- It was agreed that Lane will be the contact for ART (Advanced Rig Technology) as well as for technical publications. Mauricio and Andre will support Underbalanced operations & MPD. In regards to Well Control, Pedro and Bruno are the contacts.
- With regard to the goal of “Well Control Equipment” the group discussed the areas which they considered to be important to focus on. It was suggested to work on the reliability of equipment returned after repair, and the reliability of new equipment.
To work on this, a simple standard form was needed for gathering information from IADC members. Lane Romine and Bruno Manfredini will create a simple standard form to be used to collect data relating to BOP equipment reliability.

The following items were discussed yet they remain open

- To bring the MPD's conference exhibition to Brazil; training should focus on the equipment alongside the operations & procedures
- Feedback meetings to be considered to ensure actions from previous meetings are moving forward in the right direction
- There was a request asking for IADC's technical support for the first Platform Operations Workshop to be held in Macae on the 9th and 10th of June. The Operational/Technical committee will provide the requested technical support as instructed by Gioppo. This subject will be discussed on another forum from now on.

Next Meeting

The next meeting for the Operational/Technical committee was agreed to be held March 10th at 10:00am. The meeting will be at Transocean's office and with video to/from Seadrill's offices.