



Macaé, April 11th 2017

**MINUTES OF THE IADC-BRAZIL TECHNICAL/OPERATIONAL COMMITTEE MEETING
HELD ON APRIL 11th, 2017 FROM 3:00 p.m. TO 4:30 p.m. AT TRANSOCEAN'S OFFICE IN
MACAÉ**

Present at this meeting were the following:

- Pedro Freitas – Transocean
- Jalile Bartole Pereira – IADC-BRAZIL
- José Villanueva – QGOG
- Bruno Lodetti – Etesco
- Colin Shanks – Ventura
- Edvaldo Conceição – Odebrecht
- Fernando Alves – Falck Safety
- Geovanny Soares – GE
- John Guy – IADC-BRAZIL
- Marcus Bides – Falck Safety
- Rodolfo de Souza – Petrus
- James Wood – Petrus
- Carlos Gandolpho – Schahin
- Vitor Figueiró – Petrus
- Vanderson Carvalho – GE
- Guilherme Vanni – Petrobras
- Francisco Drumond – Petrus
- Ricardo Vieira – Ocean Rig
- Wayne Betts – Petrus
- Jeovah Lima – Petrus
- Rodolfo Correa – Petrus
- Carlos Jofre – Petrus
- Márcio Motta – Transocean
- Glaysson Castro – Petrus
- Richard Silva – Petrus
- Jorge Zaffaroni – Cameron
- Guilherme França – Ensco
- Márcio Santin – Ensco
- Eduardo de Freitas – Ensco
- Mariana Medeiros – Petrus
- Paulo Câmara – Oil States
- Thiago Furtado – Petrus
- Cláudia Monte – Oil States
- Diego Nascimento – QGOG
- Alice Ribeiro – Petrus

The objective of this meeting was to show the Technical Committee schedule for 2017 and start to discuss the Technical Presentations. The topics of discussion were as follows:

1. Introductions
2. Review of main topics for 2017
3. Technical Presentations
 - IADC DROPS Prevention initiative (update)
 - Critical Bolting Inspections – Phased array and hardness testing
4. Other topics
 - Contact list update
 - Volunteers
 - IOC's NOC's participation on IADC Brazil Chapter
 - Upcoming events: Cook-off, IADC GM
 - Open Forum



The following items were agreed upon

- Pedro Freitas showed again the main four topics that will be discussed at the technical meetings this year. DROPS Prevention Initiative is ongoing and Well Control Equipment Requirements will be discussed today. The topic “Hidroblasting Operations” is waiting on the investigation report from Petrobras. The WSOG discussion is ongoing but a volunteered Focal Point is required.
- Pedro Freitas showed the standard DROPS inspections template. The IADC-Brazil Chapter suggested to the Corporate to keep this template on the IADC website so that the entire industry can use it to do the inspections and update with their feedbacks. This idea will be discussed by the IADC Corporate in a meeting on April 27th, and they will give us a feedback until the beginning of May. The next step is to send an alert to all IADC members to use this template as soon as it is available.
- Márcio Motta presented the Subsea Work Group (Well control issues. Pedro Freitas stressed the importance of groups joining together to discuss daily problems in order to improve operational efficiency. This group was made official on the IADC Technical Committee (Subcommittee) - technical discussion that the industry needs. The aim is to bring relevant issues of the industry to the ANP and Petrobras to the next General Meetings.
- The subjects of technical presentations planned for this year were presented. In case the members of this Committee have ideas on other relevant topics, they can send them to Adm Jalile and Leader Pedro Freitas to be analyzed.
- Technical Presentation of Petrustech – Glaysson Castro e Rodolfo Correa: Critical Bolting Inspections – Phased Array and Hardness Testing. Methods developed from the demand and interest shown by the Subsea Work Group. The presentation will be sent as an attachment to this document.
- It was stressed again the importance of updating the contacts of IADC Committees members.
- The need to bring the IADC closer to oil companies was discussed. As many committee members as possible can send us contacts so that these companies are invited to participate more actively in the IADC events.
- The IADC invites all members to attend our upcoming events: the Cook-off (Family Day) on June 10 and the next General Meeting on June 29. If any company has an interest, we can offer the Cook-off banner to the dissemination of the event in the company.

Actions

- Contact list of all Drilling Contractors and IADC Members shall be updated. Each company has to send email to IADC Adm updating the contacts for Tech committee communication. The deadline is at the end of June.
- IADC will share the contact list after updates.
- People that want to participate on the 2017 Tech Committee, shall contact IADC Adm and Tech Leader. Any help is appreciated!



- The focal points of “IADC Technical presentations”, ref to presentation, shall send the presentation slides / proposal to IADC Adm (Jalile) and to the Tech Leader (Pedro Freitas). The committee will review and fit them at next meetings. The focal points are defined in the attached presentation.

Next Meeting

The next meeting for the Tech/Ops committee will be held on July 4th at 3pm at Transocean.

Referenced files / Attachments

- IADC Tech Presentation slides
- DROPS Prevention Presentation
- Petrus’s Presentation