

MAINTENANCE COMMITTEE MEETING MINUTES

16 January 2019

Location: IADC - Crown Center 1 Conference Room

Call to Order:

The committee was called to order by Mr. Michael Anatra (Chairman). A building security and safety briefing was given by Mr. Jim Rocco (IADC).

IADC Antitrust Policy and Guidelines:

Mr. Rocco also covered the IADC Antitrust Policy and Guidelines and stated that the full policy is available on IADC's webpage.

Regulatory Review / Update:

The regulatory update was presented by Ms. Holly Hopkins (API) [via telecom] and Mr. Jim Rocco (IADC).

A list of the regulatory areas that were reviewed at this meeting is included at the end of these minutes.

Class Society Topics

ABS: ABS 2019 Update presented by Mr. Chris Corcoran (ABS).

The main topics covered were:

- New ABS office location
- 12 revised publications for 2018
- 32 new publications available on their website
- Dropped objects on offshore units and installations, risk-based approach to risk mitigation and barriers, (see here for the related dropped objects video for more information).

See Chris Corcoran's presentation material at the end of these minutes. Any further questions regarding Chris' presentation (slides attached) may be addressed by him at: ccorcoran@eagle.org.

AFTERNOON SESSION- OPEN TO ONLY DRILLING CONTRACTORS

National Oilwell Varco Mr. Jonathan Stone, Reliability Project Engineer, NOV,

Open format discussion to capture ongoing issues related to NOV equipment and service, topics requiring additional feedback and follow up by NOV for future meeting include

- 1. Fingerboard finger latches premature grooving on latches; something having to do with metallurgy
- 2. Hydraulic hose Best routine/manufacturing process; Design & FAT Drag Chain
- 3. Internal Drops Standard Latest Revision Need standardized drops reporting process & visibility for operators
- 4. IBOP's Top Drive (Model)(Air/Hydraulic)(Actuator)(mud saver only)(1250 Dual design change)
- 5. Strategies for Safety Alerts, Bulletins, Product Notification Need clear /concise directions

- 6. TDX-1250 top drive issues, various, decoupling hub disengagement, (Cycle test in Orange), revised overhaul schedule, Oil migration
- 7. Hydra-Racker, swivel, maintenance and replacement.
- 8. ESD spring buttons, detent malfunction, or spring tension is too high, possibly a combination of both allowing the button to trigger unexpectedly.

Please contact the NOV representative Mr. Jonathan Stone if you have any questions or want to get clarification on any issues discussed for further meetings. [Jonathan.Stone@nov.com]

Information Sharing

- Looking to increase participation/attendance from other drilling contractors that do not attend. An email/calendar invite is planned to be sent out along with distribution of the agenda for future meetings to increase awareness and increase participation.
- 2. The committee is considering ways to leverage value-added opportunities for those attendees committing their participation and time spent. An immediately beneficial opportunity to this end is to put the information exchange portion of the meeting in the beginning, open the meeting to drilling contractors only from 09:15-10:30 AM. Doing so will help cultivate maximum engagement of participants where the practice of waiting until the later part of the agenda, as has been customary, many times proves challenging when the meeting runs over its scheduled adjournment time.
- 3. Extend an invite to Wirth to discuss equipment issues and resolutions similar to the current participation with NOV and Caterpillar.

Adjourned: 1345hrs

2019 Lunch Sponsors

10 APR 2019 TBD 10 JUL 2019 TBD 09 OCT 2019 TBD

Today's Attendees:

First Name	Last Name	Company Name
David	Cherbonnier	ABS
Chris	Corcoran	ABS
Denis J	Adams	ADAMS CONSULTING
John Paul	Guerrero	ADD ENERGY
Gordon	Lentz	ALLRIG
Daniel	Melcher	ELA CONTAINER OFFSHORE
Ryan K	Berger	ENSCO PLC
Jim	Rocco	IADC
Bill A	Waldroop	IADC
Jakub	Bednarz	INTERACTIVE TRAINING SOLUTIONS
Jonathan	Stone	NATIONAL OILWELL VARCO
Mike	Anatra	PACIFIC DRILLING
Jamie	Vargas	PRECISION DRILLING
Robert	Urbanowski	PRECISION DRILLING
Kevin	Warren	SEADRILL
Jeff	Marshall	TRANSOCEAN
Mark	Temple	UL LLC E&PT- HOUSTON
Jerilyn	Merrill	UL LLC E&PT- HOUSTON
Gary	Lohman	VANTAGE DRILLING INTERNATIONAL