



DEA(e) 3rd Quarter Meeting
13th & 14th September 2007
Hosted by Hydro at SAS Radisson Royal Hotel, Bergen, Norway

Topic: Managing Pressure While Drilling

Dear DEA(e) Members,

Please find enclosed the CD containing the presentation material and proposals from the 3rd Quarter 2007 DEA(e) meeting held in Bergen, Norway.

The meeting took place at the SAS Radisson Royal Hotel, Bergen, Norway. Our sincere thanks go to Sigve Hovda at Hydro for the excellent hospitality and organisation for the third DEA(e) meeting of 2007.

The meeting was attended by 49 participants – a mixture of experts and novices in the various areas of MPD.

The meeting technical chairman, Giancarlo Pia from Talisman Energy, put together an excellent range of speakers with the help of the DEA(e) committee which resulted in a wide ranging overview of the different technical subjects. Giancarlo gave an excellent opening to the meeting and talked of what he expected out of the 1½ days.

Sigve Hovda opened the meeting with a warm welcome and also gave a very informative overview of Hydro and its global operations.

The 1 ½ days saw a broad range of excellent presentations from both operators and service companies. The operator presentations came from: Hydro, Statoil, and Chevron. Glen Waldron from Hydro gave a thorough overview of the deployment of MPD technology in the Grane field. He covered the logic for MPD use, the equipment used and how the operation went. He then gave a great summary on the positives, negatives and lessons learned from the experience. Svein Syltoy of Statoil presented the Kvitebjorn MPD project. He explained the specialist MPD equipment used then gave a detailed case study of the A-13 well. Paul Sonnemann of Chevron presented some of the MPD technologies and procedures being developed for the Alba field. The main technology he introduced was a super choke that could be used to control bottom hole pressure at connections.

The service companies were very well represented. Helios Santos from Impact explained his MPD system's configuration and operation. He illustrated its outputs by showing a comparison of a ballooning event versus an actual kick. It was then explained how the system could automatically interpret the different fingerprints of these events and react accordingly. Tim Tonnessen from Halliburton covered their MPD global experience with a broad overview then some more specific examples from Norway. He finished by providing an insight into future MPD technology developments from Halliburton. Tom Fuller from Weatherford also gave some interesting case studies from around the world. He also looked at areas where MPD technology development is likely to occur in the coming years.

Paul Fredericks of @balance gave case studies on Gulf of Mexico deepwater work for Shell that required MPD. He explained these wells had a very tight fracture to pore pressure margin. The technologies and practices that were used to deal with this problem were then explained for each case study. Later in the meeting Paul co-presented with Ralf Zaeper of Baker Hughes Inteq on a shallow MPD well in offshore Myanmar. The crux of the presentation was on the implementation of wired pipe to increase the transmission speed of ECD data. Due to the shallow nature of the gas, normal PWD data transmission was not fast enough to allow sufficient kick response time.

Bill Abel of ABEL Engineering gave an interesting presentation on the use of snubbing technology as an alternative to rotating control devices for MPD work. Rod Vogel of Varco, presented the Continuous Circulation System that allows circulation to be maintained at connections. He showed some of the product development areas prior to implementing the system on Kvitebjorn and then reviewed the CCS performance on the Kvitebjorn project.



In the area of modelling Knut Bjørkevoll explained Sintef's flow model for the Kvitebjorn. The system was developed to provide real-time regulation of choke set point. Gerhard Nygaard of IRIS covered MPD related automation and the associated algorithms required to compute responses to MPD events.

A new riser system for MPD was presented by James Dech and Borre Fossli of Ocean Riser Systems. This system managed bottom hole pressure through use of a mud return pump changing the mud level in the riser.

The out of the box presentation was from Daniel Jones of the National Oceanography Centre in Southampton, UK. He covered Project Serpent, an initiative to make use of idle ROV on rigs for the study of marine animals. He showed a broad range of pictures and film captured by the ROV's. He also explained that damage to marine animals only extends 100m from the rig site as opposed to previous estimates of 2 km. This was a refreshing diversion from the subject of MPD and was well received by all.

An enjoyable addition to the meeting was a discussion session with John McCullagh, Schlumberger where attendees were asked to debate the perceived barriers to UBD/MPD implementation offshore and possible mitigating actions. Results of the discussion session are available on the DEA(e) website for members.

Knowledge Systems concluded the presentations with a JIP proposal. The proposal was to develop best practice guidelines, tools and training in the area of well bore stability and pore pressure prediction.

On the Thursday evening, Hydro hosted an excellent tour around the beautiful city of Bergen followed by a gourmet evening meal.

Lastly, please join me in thanking the steering committee who are: Paul Lurie (BP and Chairman), Sigve Hovda (Hydro), Odd Harald Thowsen (Odfjell Drilling), Alistair Oag (Schlumberger), Ivor Palmer (BG), Jens Melchoirsen (DONG) and Neal Watson (OMV). The steering committee put significant time and effort into ensuring that the members' interests are at the forefront of DEA(e) activities.

As ever, if you have any questions or thoughts regarding the DEA(e), please do not hesitate to contact Shreekant or Dawn on shreekant.mehta@otmnet.com / dawn.dukes@otmnet.com +44 1483 598 000.

With regards,
Rob Hamilton