



**IADC UBO & MPD  
Committee Meeting  
Halliburton  
Houston, Texas USA**

**5-7 December  
2011  
4<sup>th</sup> Quarter**

**Attendance Sheet**

<b>Name</b>		<b>Company Name</b>
Don	Reitsma	@Balance
Roger	Stave	AGR Drilling Services
John	Cohen	AGR Subsea Inc.
Richard	Brainard	AGR Subsea Inc.
Martin	Culen	Blade Energy Partners
Louis	Romo	BP
Kent	Fortney	BSEE
Dana	Witt	Chevron
Ossama	Sehsah	DPM/Schlumberger
Ahmet	Duman	GE Oil & Gas
Craig	Godfrey	Halliburton
Isabel	Poletzky	Halliburton
CJ	Bernard	Halliburton
Emad	Bakri	Halliburton
Randy	Lovorn	Halliburton
Mike	Vander Staak	Hess Corporation
Clayton	Mykytiw	Hess Corporation
Ken	Fischer	IADC
Brenda	Kelly	IADC
Leesa	Teel	IADC
Jeff	Robbie	Managed Pressure Operations
Dennis	Moore	Marathon Oil Company
Mike	Offner	MI Swaco
Alan	Clarke	National Oilwell Varco
Tracy	Mossman	Nexen
Jason	Power	Noble do Brasil
Kristin	Falk	Ocean Riser
James	Dech	Ocean Riser
Frederic	Jacquemin	Pacific Drilling



**IADC UBO & MPD  
Committee Meeting  
Halliburton  
Houston, Texas USA**

**5-7 December  
2011  
4<sup>th</sup> Quarter**

Robert	Ziegler	<b>Petronas Carigali Shd Bhd</b>
Kenneth	Downs	<b>Pruitt Tool Co. Inc.</b>
Shawn	McBride	<b>Pruitt Tool Co. Inc.</b>
Stephen	Taylor	<b>Pruitt Tool Co. Inc.</b>
Gene	Riddle	<b>Repsol</b>
Juan Carlos	Beltran	<b>Schlumberger DPM</b>
Sara	Shayegi	<b>Shell E&amp;P</b>
Brian	Tarr	<b>Shell E&amp;P</b>
Sagar	Nauduri	<b>Signa Engineering Corp.</b>
Jaye	Shelton	<b>Smith Services/Schlumberger</b>
Keith	Davidson	<b>SPT Group</b>
Dag Ove	Molde	<b>Statoil</b>
Per Cato	Berg	<b>Statoil</b>
Gavin	Humphreys	<b>Stena Drilling</b>
Jasmin	Begagic	<b>Transocean</b>
John	Kozicz	<b>Transocean</b>
Guy	Feasey	<b>Weatherford International</b>
David	Pavel	<b>Weatherford International</b>
Don	Hannegan	<b>Weatherford International</b>
Tom	Bailey	<b>Weatherford International</b>
Brian	Grayson	<b>Weatherford International</b>
Rosalvina	Guimerans	<b>Weatherford Laboratories</b>
Barry J.	Cooper	<b>Well Control School</b>


**Monday, 5 December 2011**

**Welcome, Announcements & Safety Moment.**

Emad Bakri opened the meeting, provided information about the venue and gave the safety briefing. Sara Shayegi (SS) welcomed the members and thanked Halliburton for hosting the meeting. Ken Fischer (KF) made other announcements and reminded members about IADC antitrust policy. Craig Godfrey volunteered to take meeting notes.

**Introduction of New Committee Members and Guests.**

Each attendee introduced themselves including their company name and location.

	<p style="text-align: center;"><b>IADC UBO &amp; MPD Committee Meeting Halliburton Houston, Texas USA</b></p>	<p style="text-align: center;"><b>5-7 December 2011 4<sup>th</sup> Quarter</b></p>
---	---	--

**Review & Approval of 3Q11 Meeting Minutes.**

The group reviewed the draft 3Q11 meeting minutes. SS explained minutes pertaining to API Standard 53. The group discussed minutes pertaining to the presentation by DNV and added language. The minutes were approved as amended. In response to a question regarding Committee membership, KF explained the Committee's "three strikes you're out" rule.

**Discussion of Definition of "Dual Gradient".**

John Cohen led discussion of the term "Dual Gradient". A handout of the proposed definition was circulated to attendees; *"Establishment of multiple pressure gradients (two or more) within selected sections of the well to manage the well pressure profile"*. The Committee recognized that "Dual" means two, but in practice can be more than two, so we should accept the well known industry defined term but with current use. After lengthy discussion the Subcommittee agreed to consider the comments and revert with a new proposal.

**Report on status of US BOEMRE Draft NTL on Dual Gradient Drilling.**

Richard Brainard (RB) made a PowerPoint presentation on the status of the draft NTL. The group discussed the need for definitions and diagrams of the various DGD techniques. The Committee considered how riser margin needs to be addressed and barrier philosophy considered. RB explained the need to finalize the definition of "dual gradient".

**Discussion of MPD candidate screening tool.**

Sara Shayegi reported on the status of the screening tool. IADC has set up a domain on its web site. Jim Dech explained that Interface problems have been encountered with the ".net" format. A handout was circulated describing various options. Jim Dech agreed to meet with IADC web master to implement a downloadable version from the IADC website.


**Discussion of UBO/MPD Training Initiative.**

Martin Culen gave a report on the UBO/MPD training initiative. He reviewed the reasons for revising the UBO WellCAP curriculum and eliminating the UBO Rig Pass course. He emphasized that the UBO WellCAP curriculum was not being changed but that the elements were being reorganized into Introductory/Fundamental and Supervisory levels that more closely align with conventional well control training. The I/F level would be 1.5 days and the Supervisory level would be 3.5 days, with simulator exercises and assessment.

MC reported that Ian Davidson and Brian Grayson had attended the last IADC Well Control Committee meeting to inform them of the plan and to recruit participation, particularly from the commercial training providers.

Brenda Kelly, IADC Senior Director - Accreditation and Certification, informed the group about the procedure for revising the UBO WellCAP curriculum. MC will begin the submission process. The group discussed future initiatives including MPD and DGD training. A question was raised concerning whether the introductory training could be delivered in the field.

**Status of proposal to reaffirm API Spec 16RCD.**

	<p style="text-align: center;"><b>IADC UBO &amp; MPD Committee Meeting Halliburton Houston, Texas USA</b></p>	<p style="text-align: center;"><b>5-7 December 2011 4<sup>th</sup> Quarter</b></p>
---	---	--

Brian Grayson reported on the status of API Spec 16RCD. The document has not been sent out for ballot to reaffirm or revise. The Committee had previously agreed to recommend that the document be reaffirmed, however several members expressed concern with this approach. Some suggested that work to revise should begin immediately. The consensus was that the document should not be allowed to expire.

A motion was made and seconded that the Committee should advise API to reaffirm the document. The motion passed with one nay vote.

**Report on status of IADC/SPE Conference and Dual Gradient Seminar in Milan.**

Leesa Teel, IADC reported on the status of plans for the events to be held in Milan in March 2012. The group agreed to review the Seminar program during the DGD Subcommittee breakout.

The program for the Conference was reviewed along with proposals for revising the session allocations. The program was finalized for publication. The group discussed volunteers for session chairmen. Panel discussions were kept as originally proposed.

**Discussion of Draft HSE Planning Guidelines.**

Don Reitsma reported on the status of revision to the HSE Planning Guidelines. Work has been taking place offline with sections of the document being assigned for revision. A complete draft will be distributed to the Committee for review at the 1Q12 meeting.

**Report on status of Marine Guidelines Task Group.**

John Kozicz reported that the group had been considering issues related to riser use during MPD and were prepared to offer proposed language for the MPD “best practice” document.


**Report on Outreach activities.**

No report. Ken Fischer agreed to contact Robert Goodwin to determine whether he would continue to lead the Outreach Subcommittee.

**Review 2012 meeting plans.**

- **19 March 2012**, Dual Gradient Seminar in Milan
- **20-21 March 2012**, IADC/SPE Managed Pressure Drilling & Underbalanced Operations Conference & Exhibition in Milan
- **1Q12** – 22-23 March in Milan, IADC staff is in contact with ENI/Saipem to sponsor. The Conference hotel does not have sleeping rooms available during the Committee meeting so an alternative site is being sought.
- **2Q12** – 4-6 June to be held in Oslo hosted by Ocean Riser Systems.
- **3Q12** – 10-12 September to be held in Houston hosted by Pacific Drilling.
- **4Q12** – 3-5 December to be held in Copenhagen hosted by Hess.

**Discussion of Addendum to API RP92U – Underbalanced Drilling Operations, 1st Edition.**

	<p style="text-align: center;"><b>IADC UBO &amp; MPD Committee Meeting Halliburton Houston, Texas USA</b></p>	<p style="text-align: center;"><b>5-7 December 2011 4<sup>th</sup> Quarter</b></p>
---	---	--

David Pavel gave the background issues pertaining to RP92U, Section 5.4, Well Control Matrix. The current Well Control Matrix refers to the *dynamic* pressure rating of the RCD. This reference is thought to be inconsistent with testing protocols contained in API Spec 16RCD for rotating control devices. A revised matrix, referring to the *stripping* rating, had been distributed to the Committee prior to the meeting. Comments received were in favor of amending or revising RP92U. Some commenters also raised other questions about the content of the matrix. The implications of the use of the various RCD ratings were discussed by the group.

After discussion a **Motion was made** to recommend to API that the revised well control matrix and associated well control matrix design parameters should be incorporated into RP92U in the most expedient manner (whether that be by addendum or by issuing a second edition). **This Motion failed.**

The group continued to discuss changes to the matrix and associated design parameters. David Pavel agreed to incorporate proposed changes and resubmit the draft design parameters for consideration the next day.

**Discussion of status of MPD “best practice” document.**

David Pavel reported on the status of drafting the MPD “best practice” document. He noted that work would continue, focusing on managed pressure drilling with applied backpressure with a single-phase fluid.

**Nomination of Committee Officers for 2012.**

Ken Fischer introduced the topic, reminding the group that it was customary for the Vice Chair to be elected Chairman for the subsequent year. **A Motion was made** to elect Dag Ove Molde as Chair for 2012. **The Motion passed.**

Ken Fischer requested nominations for 2012 Vice Chair. Voting would take place the next day. The following were nominated:

- Mike Vander Staak, Hess
- David Pavel, Weatherford
- Martin Culen, Blade


**Any Other Business.**

Dag Ove Molde informed the group about an initiative to revise NORSOK Standard D-10, Well Integrity in Drilling and Well Operations. This initiative is being headed by Per Cato Berg of Statoil. Although the deadline for the first round of comments had passed, Per Cato Berg said that he would still consider comments from the Committee. The revised document is expected to be completed in the summer of 2012.

**Breakout into Task Groups & Subcommittees**

The Committee divided into breakout sessions.

**Tuesday, 6 December 2011**

	<p style="text-align: center;"><b>IADC UBO &amp; MPD Committee Meeting Halliburton Houston, Texas USA</b></p>	<p style="text-align: center;"><b>5-7 December 2011 4<sup>th</sup> Quarter</b></p>
---	---	--

The meeting was called to order by Sara Shayegi. Safety, comfort and smoking arrangements were reviewed by Randy Lovorn and Emad Bakri. Subcommittees and Task Groups were asked to report on their meetings the previous afternoon.

### **Report of Dual Gradient Drilling Subcommittee**

John Cohen reported that the Subcommittee had reviewed the program for the Dual Gradient Drilling Seminar to be held in Milan on 19 March 2012. He noted a few changes to the program. He also proposed a revised definition for the term “dual gradient” as follows:

- *“Two or more pressure gradients within selected well sections to manage the well pressure profile.”*

**A Motion was made to adopt this definition.** Ken Fischer asked if any of the members wished to have the definition considered in accordance with the Committee’s official ballot process. Since no one wished to request the ballot process, a vote on the Motion was taken. **The Motion passed.**

### **Report of Breakout Session to Consider Changes to API RP92U**

David Pavel reported on a breakout session to consider revisions to RP92U. He presented revisions to the matrix and accompanying design parameters as proposed in the breakout. The group discussed these proposals as well as the most timely and effective method for publicizing the changes. The group agreed to continue the discussion the next day.

### **Election of Committee Vice Chair**

The nominees were asked to leave the room and a vote was taken by show of hands, one vote per company. Mike Vander Staak was elected Vice Chair for 2012.

### **Breakout into Task Groups & Subcommittees**

Breakout sessions were held to work on the draft DGD NTL and the MPD “best practice” document. Before adjourning for the day the Committee reconvened and decided to submit revisions to RP92U to API and request that the document be reissued as the second edition. The Committee also agreed that Spec 16RCD should not be withdrawn and wished to consider various options for revision.

### **Wednesday, 7 December 2011**


The meeting was called to order by Sara Shayegi. Safety, comfort and smoking arrangements were reviewed by Randy Lovorn. A proposal was made to recommend to API that a Task Group be formed to begin review of Spec 16RCD.

The committee members expressed their appreciation to Ken Fischer’s for his contributions, guidance and support of the committee and wished him well on his retirement.

### **Breakout into Task Groups & Subcommittees**

Breakout sessions were held to work on the draft DGD NTL and the MPD “best practice” document.

### **Breakout Session Summaries**

	<p style="text-align: center;"><b>IADC UBO &amp; MPD Committee Meeting Halliburton Houston, Texas USA</b></p>	<p style="text-align: center;"><b>5-7 December 2011 4<sup>th</sup> Quarter</b></p>
---	---	--

The Committee reconvened to hear summaries of the breakout sessions. A discussion was held regarding the API monogram program and the value of it for manufacturers and end-users. The importance of alignment between Spec 16RCD, RP 92U and the MPD “best practice” document was discussed. It was agreed that the Committee should recommend that API reaffirm Spec 16RCD but that work on the 2<sup>nd</sup> Edition should begin as soon as possible. Martin Culen was asked to chair the Task Group to revise Spec 16RCD. It was suggested that a survey of RCD manufacturers and end-users be conducted to learn their views on the document. These manufacturers should be recruited to participate in the revision process. Non-rotating control devices should be included.

Kristin Falk reported on the work of the DGD Subcommittee. She gave a recap of the changes to the Seminar agenda. The Subcommittee agreed to provide NORSOK with a copy of the draft NTL when completed. The NTL Task Group had agreed to remove most of the material in the attachments, including the glossary. When completed the draft would be circulated to the Committee for final review. In 2012 the Subcommittee expects to produce “educational” material such as the glossary and diagrams of techniques removed from the NTL. The group hopes to recruit additional participation, particularly from Brazil. Additional seminars may be considered.

David Pavel reported on the discussions of the MPD “best practice” group. The revised “UB Drilling Matrix” and associated design parameters would be forwarded to API with a recommendation that these be included and issued as a 2<sup>nd</sup> Edition of RP 92U. A similar matrix would be developed for the MPD “best practice” document. The latest draft of the “best practice” document would be posted as a Word document and commenters would be asked to provide comments in “Track Changes” mode.

Regarding the changes to the UB Rig Pass and UB WellCAP programs, Martin Culen reported that he would draft the appropriate documents for submission to IADC’s Accreditation & Certification Program.

Jim Dech reported that he will continue to work with IADC staff to implement the MPD screening tool.

The group discussed allocation of resources to the revisions to Spec 16RCD vs. the MPD “best practice” document. It was agreed that concerted effort would be placed to complete the MPD “best practice” document within the next two committee meetings. It was requested that subcommittee participants pre-read and have revisions submitted prior to the committee meeting using word’s “track changes” to speed the process. The initial survey of RCD providers would be initiated , with Martin Culen leading the 16RCD Task Group.

**Adjournment:**

Sara Shayegi recognized Halliburton for their sponsorship and thanked all participants for their time and effort over the course of the meetings. The meeting was then adjourned.