

International Association of Drilling Contractors



UBO & MPD Committee Meeting

15-16 April 2015

The Address Dubai Marina Hotel
Dubai Marina
Dubai, UAE

Constellation Ballroom I

Minutes

DAY 1 – Wednesday 15th April 2015

Welcome, Announcements & Safety Moment.

8:40: David Pavel welcomed the UBO-MPD committee. Reminder given on actions to take in the event of a Hotel Emergency Alarm. The IADC Anti-Trust Policy and Guidelines were brought to the attention of the Committee. The Guidelines can be retrieved in their entirety from the IADC Web Site.

08:45: Safety Moment – DVT Risks were discussed with observation to Keep Moving, Stay Active

08:50 Review of Q1 Meeting, held in Houston.

UBD Subcommittee	Dennis Moore Mike Vanderstaak	<ul style="list-style-type: none">• API 92U comments, No Update
MPD Subcommittee	Per Cato Berg John Kozicz	<ul style="list-style-type: none">• 92M Applied Backpressure Surface Stack• Finished IADC RP for PMCD / Subsea BOP sent to API Technical Writers• Started IADC RP for MPD / Subsea BOP. Currently merging sections. Petrobras contributing much technical detail. Draft is currently available for review.• General discussion on how to move forward with this
Dual Gradient Subcommittee	Iain Sneddon	<ul style="list-style-type: none">• Getting ready for DGD workshop at Moody Gardens following Well Control Conference.• Looking for followers to take notes and participate in workgroups during this workshop.
Comment	Earl Dietrich	<ul style="list-style-type: none">• ATW Brazil, Followed by Well Control Conference, Concurrent with IADC UBO-MPD Committee Meeting, Followed by DGD Workshop. Questionable how much participation we will have
Training	Oscar Gabaldon	<ul style="list-style-type: none">• Q1 meeting – continued development of supervisory curriculum• Planned to work on this, but CJ Bernard (HAL), Ryan Haggins (WFT), Juan Carlos Beltran (SLB) not present.

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09:00 Introduction of Committee Members and Guests.

The group was then asked to introduce itself. Each attendee gave an introduction including company name and work location. See Appendix 1 for the detailed list of the attendees.

Earl Dietrich & Iain Sneddon agreed to be Minute Takers.

09:00 Discussion of the Meeting Agenda

Well Control Committee update	Earl Dietrich	<ul style="list-style-type: none">Well Control Committee LiaisonAdvised that this is mostly a Quarterly Training Discussion
Gas In Riser Subcommittee	David Pavel Earl Dietrich Helio Santos Dag Vavik	API 64 RECOMMENDED PRACTICE FOR DIVERTER SYSTEMS EQUIPMENT AND OPERATIONS
Regulatory Certifying Authority	Earl Dietrich CJ Bernard	No Update No Update (DNV-GL, ABS, Lloyds)
API 16RCD	Martin Culen	<ul style="list-style-type: none">Changes to Edition 1 – rationalizing final commentsConcerned that a Re-Ballot may have been necessaryFortunately changes did not require Re-BallotRP 7 Test standards being reviewed

09:25 Revision of MPD Text Book

Textbook published by Pennwell is now owned by Elsevier. Elsevier have approached Ian Davidson (Consultant formerly with Shell) to co-ordinate an update. He appealed for volunteers from the Committee to be reviewers / contributors to the new version.

Ian would like any interested member to contact him directly to coordinate the efforts. Ian's email is ian.davidson@ianadav.com

09:45 - 10:15 Break

10:20 Ryan Klemetson – Tolomatic

Presentation of ideas regarding Standardization on Electric actuators:

- No common thread on performance for Choke actuators, API 6A only requires 200 cycles to achieve PR2. Is this an acceptable number for continuous duty applications? Is there a better number? How many hours continuous operations. Should a cycle be full open/close or incremental adjustments? Is 30sec full close adequate? Should choke drift in power loss be a design feature? Does the choke need to achieve a drop tight seat, or are secondary barriers used for shut-in. Assume assembly should not need calibration on restart. API 17D = ISO 13628-4, Design and operation of subsea production systems—Part 4: Subsea wellhead and tree equipment.

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- Some discussion on UBD-MPD Choke API Spec. What is the duty required, cycles, reliability, and as far as calibration and standardization, why wouldn't this be a standard.
 - Discussion on Overbalance/Underbalance and choke reliability, testing, standard, as well as criticality of failure.
 - Lastly discussion on Duty/Service of the chokes during MPD/UBD. There is some disagreement in whether they should meet a more rigorous duty cycle than API 6A, or not.

Action: *David Pavel will build it into the agenda for the next Meeting in Houston.*

10:55 API 92M Comments

These need to be addressed in order to move the document forward.

11:15 Start Breakout sessions - 4 Groups

- 16RCD
- Training
- Applied Backpressure (ABP) MPD with Subsea Stack
- Dual Gradient Drilling (DGD)

12:00 Break for Lunch

13:00 Resume Breakout sessions

16:00 Reconvene Groups for debrief

Group	Breakout Group Notes:
16RCD Martin Culen	<ul style="list-style-type: none"> • Figured 16RCD was ready to close-out. • Have determined that additional work is required on the document to prepare for Revision, and Re-Ballot. <ul style="list-style-type: none"> - Primary issue is elastomers API 14A - Some work around testing / manufacture clarifications is required
Training Oscar Gabaldon	<ul style="list-style-type: none"> • Work on Introductory and Supervisory Core Curriculum. Need to address: <ul style="list-style-type: none"> - Certification / Re-Certification - IADC Certification ? or WCI (Well Control Institute) - Propose an MPD add-on (influx management, dynamic well control) to WCI - How to certify instructors going forward? - Won't land on Core Curriculum by end of day tomorrow. Hopefully will be very close. -
DGD Iain Sneddon	<ul style="list-style-type: none"> • Post Madrid Workshop – looked at moving DGD back into MPD conference • Conference vs. Workshop format – Workshop 2015, not in 2016 • Need to get more aligned with MPD Conference bringing DGD back in by participation in paper selection committee. • Starting to participate in Advanced Rig Technology, and Well Control Conferences • Start reviewing NTL (BSEE) from 2012, and look at how to build RP for DGD in relation to multiple kinds of systems. • Review MPD-HSE Guidelines and look for DGD enhancements
MPD RP Per Cato Berg	<ul style="list-style-type: none"> • Divided 266 comments into groups for processing • Worked through Chapter 13 (Applied Backpressure Subsea Stack) • 14 are outstanding, when 2-days over, will issue to committee for review.

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16:30 Meeting adjourned for the day

DAY 2 - Thursday 16th April 2015

08:40 Introduction by David Pavel, plan to review Q1 Meeting Minutes prevented by AV issues.

08:42 HSE Subcommittee will work at Blade Energy Offices due to loss of room.
RCD Subcommittee will work at Blade Energy Offices due to loss of room.
No breakout session for DGD Subcommittee.
All Groups to reconvene back in Main Room at 15:30 hrs

08:45 Review of Q1 Meeting Minutes – majority had yet to read same, any comments?

- Issue with dates / location of forthcoming meetings, needs to be checked & corrected.
- changes to WellCap, letter to be drafted, David Pavel confirmed that letter had been sent. No response as yet, David Pavel to follow up with Mark Dankowski, Well Control Committee.
- Proposed Acceptance of Minutes made by John Kozicz, seconded by Iain Sneddon, agreed subject to check and revision of dates mentioned.

08:50 Groups Breakout.

12:00 Lunch for those still in Main Room

13:30 Continue with Breakout Sessions

14:35 David Pavel suggested that Group should review and agree what the Committee should be working on in the future.

Groups reconvene at 15:10

Topics suggested for future work and captured in list by Per Cato Berg; Document to be shared with entire Committee by Per Cato Berg for review prior to next Meeting so that agreement can be reached on what the Committee should be working on, moving forward.

Question: Does revision of API 16RCD and comments close-out need to be reviewed by entire Committee?

Answer: No; anyone interested just needs to participate in the task Group.

- Comments on API 92M need to be reviewed by the API 92M Task Group at the next Quarterly meeting.
 - Applied Backpressure Subsea Stack (ABPSS) Document to be worked on at the next meeting.
- Discussion generated the following list regarding prioritization of IADC Documentation (SEE ATTACHED TO BE DISCUSSED IN Q3):

1. RCD (API 16RCD Revision)
2. RP ABP - Surface Stack
3. RP PMCD – Subsea Stack
4. RP ABP – Subsea Stack
5. RCD Operational Standard
6. MPD Core Curriculum
7. UBD Core Curriculum
8. API 92U Revision (including CBHP using Gas Injection?)
9. RP PMCD – Surface Stack
10. Flow Control System (Choke Standard / RP?)

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11. Process Safety with respect to MPD and RGH (Riser Gas Handling)
[ref. IEC61508; Safety Instrumented System]
12. RP for Continuous Circulation
13. Dual Gradient: Seabed Pumping (Category 3)
14. Dual Gradient: Controlled Mud Level (Category 3)
15. Dual Gradient: Mudline Pumping? (*Is this meant to mean Riserless?*)
16. Dual Gradient: Dilution (gas & Liquid)
17. ECD Reduction Tool
18. ECD Control – Concentric Drillpipe
19. RCD only
20. Enhanced Kick / Loss Detection
21. Floating Mud Cap (FMCD)
22. Delta Energy (Category 3)
23. Bottle Up or Trapped Pressure
24. CBHP using Gas Injection
25. Air Drilling

15:30 Feedback from Breakout Sessions

Group	<u>Breakout Group Notes:</u>
<p>Training Subcommittee</p> <p>Oscar Gabaldon</p>	<p>MPD Training Current Status:</p> <ul style="list-style-type: none"> • Core Curriculum for MPD being developed <ul style="list-style-type: none"> ○ MPD Fundamentals up for vote on Committee (Needs review before vote?) ○ MPD Supervisory being developed ○ Need to develop Influx Management section as a module • Format <ul style="list-style-type: none"> ○ Fundamental (8 hrs) and Supervisory (24hrs, including Influx Management module) levels. Module on Influx Management (8 hrs) can be proposed as add-on for IADC Well Control certification ○ MPD Training should be IADC Certified <ul style="list-style-type: none"> • 2 year certification • Not part of IADC Well Control • To be discussed with IADC • Recertification: Refresh course. Take full class every other certification period. Take refresh class in between, before current certification expires. • Need to develop refresher curriculum - extract from core curriculum. Could be just the MPD Influx Management module. • What would testing requirements be? <p>Plan of Action:</p> <ul style="list-style-type: none"> • Continue working on curriculum. • Will try to work offline, since next two quarterly meetings will most likely not have breakout sessions (Oscar G. to follow up). • Distribute latest material to work group. • Define transition process to adopt certification <ul style="list-style-type: none"> - Oscar G. to pursue with IADC - Oscar G. and Martin C. to go over decision on UBO & Well Control for final approval

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	<ul style="list-style-type: none"> • Current MPD personnel: How to certify - Just test? - Option: Take MPD Influx Control module and then test.
<p>API 16RCD Martin Culen</p>	<ul style="list-style-type: none"> • Working on Operational Testing Standard, based on API 7CW and created API 16XXX Standard Testing Template. • Listed requirements of what we would expect to Report and came up with a “braindump” Testing Report to give operational envelope of an RCD. • Consider that some RCDs may use different drilling & stripping elements. • Heave effects on floaters • Added more details to tests required, representing drilling modes (RIH at OEM designated stripping rate, Drill Ahead Tests, review & build an operational envelope. Test Standard might be used when reviewing non API monogrammed RCDs. • This Standard will <u>not</u> replace API 16RCD but live alongside it.
<p>Applied Back Pressure Subsea Stack Per Cato Berg</p>	<p>Following information is as per Action Plan generated by Per Cato Berg:</p> <ul style="list-style-type: none"> • 92M Applied Backpressure - Surface Stack <ul style="list-style-type: none"> ○ Divided the 266 Comments into Groups for processing in between Meetings <ul style="list-style-type: none"> ▪ Editorial Comments: 108 (Per Cato Berg) ▪ Chapters 1 & 2 : 10 (Per Cato Berg) ▪ Chapter 3 : 10 (John Kozicz) ▪ Chapter 4 : 17 (Ron MacInnes & Paul Francis) ▪ Chapter 5 : 47 (John Kozicz) ▪ Chapters 6 & 7 : 16 (Brian Grayson) ▪ Chapter 8 : 58 (Willie Kennedy & Andre Fernandes) • Applied Backpressure - Subsea Stack <ul style="list-style-type: none"> ○ Worked through Chapters 13 & 14 ○ Per Cato to issue to committee for review

15:50 Meeting adjourned David Pavel thanked participants and looked forward to seeing all at Q3 Meeting to be at the IADC Offices in Houston

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Appendix 1: Attendees List

Name		Company Name
Harish	Patel	AMERICAN BUREAU OF SHIPPING
Martin	Culen	BLADE ENERGY PARTNERS
Oscar	Gabaldon	BLADE ENERGY PARTNERS
Patrick	Brand	BLADE ENERGY PARTNERS
Nate	Smith	CAMERON
Glenn	Johnson	CAMERON
Andre	Perales	CANRIG DRILLING TECHNOLOGY
Neil	Hathaway	CANSCO WELL CONTROL
Dale	Straub	CHEVRON
Jeff	Graybeal	DIAMOND OFFSHORE DRILLING
Francisco	Chavez	DNG GL
Roger	Stave	ENHANCED DRILLING
Kristin	Falk	ENHANCED DRILLING
Carlton	Walden	EXXONMOBIL
Mike	Vander Staak	HESS CORPORATION
Leesa	Teel	IADC
Ian	Davidson	IANADAV LLC (TRAIN-US-WELL)
Dennis	Moore	MARATHON OIL COMPANY
Dag	Vavik	MHWIRTH
Ron	MacInnes	M-I SWACO
Paul	Francis	MI-SWACO
Neil	Ross	NATIONAL OILWELL VARCO
Shantur	Tapar	NATIONAL OILWELL VARCO
Frédéric	Jacquemin	PACIFIC DRILLING
Wil	Kennedy	PARAGON OFFSHORE
Guilherme	Vanni	PETROBRAS
Andre	Fernandes	PETROBRAS
Eduardo	Schnitzler	PETROBRAS
Emmanuel	Nogueira	PETROLEO BRASILEIRO S.A.
Roar	Sognnes	PETROLEUM SAFETY AUTHORITY NORWAY

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Svein	Horn	PETROLEUM SAFETY AUTHORITY NORWAY
Martyn	Parker	PRUITT TOOL & SUPPLY CO
Helio	Santos	SAFEKICK
Duff	Sibanda	SCHLUMBERGER
Mauricio	Aguiar	SEADRILL
David	Elliott	SHELL
Per	Berg	STATOIL
Gavin	Humphreys	STENA DRILLING
John	Kozicz	TRANSOCEAN
Iain	Sneddon	TRANSOCEAN OFFSHORE
Earl	Dietrich	WEATHERFORD UNITED STATES
Bryan	Grayson	WEATHERFORD UNITED STATES
James	Chambers	WEATHERFORD UNITED STATES
David	Pavel	WELLING & COMPANY