IADC	**IADC UBO & MPD Committee Meeting**	**4th Quarter Meeting December 9-11 2014 Houston, TX USA**

DAY 1 – Tuesday December 9th 2014

Welcome, Announcements & Safety Moment.

Martin Culen welcomed the UBO-MPD committee. Mr. Warren IADC gave us a welcome speech and covered the building safety and IADC antitrust policy. The guidelines can be retrieved in their entirety from the IADC web site.

Safety moment was given by, Fredric J., Pacific Drilling on Holiday Safety. He covered home fires and electrocutions, focusing on trees, fireplace, kid's toys, use of GFCI, overloading of circuits, space heaters, and avoiding counterfeit equipment.

Martin then thanked the meeting sponsors – Shell and IADC.

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.

CJ Bernard (Halliburton) was coerced to be a minute taker for day 1.

2Q14 Meeting Minutes - Review

The previous minutes were not officially approved. Martin provided a recap of the minute for all attendees. Motioned to approved. Seconded by CJ. Minutes were approved unanimously.

Subcommittee reports

Separate subject--Committee needs to review who should be our contact with API and have a review of what needs to be brought to the forefront (documents, procedures, policies etc)

Nominations were made by Mike VDS and nominations will be done PM of the meeting.

The following updates were provided:

- **UBO Subcommittee – Dennis M & Isabel P**

Isabel was unable to attend. Dennis M provided the update.

Currently working on a draft that API 92U circulated for review. API communications were discussed and there is a need to have an official meeting with API presence, to close out from the last ballot voting. Isabel will follow up with Roland (API) to set up meeting to get the document published.

- **MPD Subcommittee – John K, Per Cato**

Working on PMCD for subsea stack document

- Documents currently being worked on, were sent out for further review, and during the web meeting. Then all comments were reviewed, and worked through, and it looks like the current version will be what is submitted to API as an appendix to API 92M.
- Sara is working on the TOC for the combined 92M.
- New areas to be worked will include Sub Sea Back Pressure.
- Sara is custodian of the overall document.
- 92M ← Brian G.
- PMCD S/S ← John K.
- MCD Surface ← Bob G.
- MPD ABP S/S ← Gavin (needs confirmation).
- Overall Document ← Sara S.
- 92U ← Isabel.

API has sent out the 92M doc for ballot and the deadline is Jan 17 2015.

- **DGD Subcommittee – <u>Frederic J</u>**

Frederic provided the update on Future DGD workshops structure, format and content.
DGD presentations will be at Dubai IADC UBO/MPD Conference.
The workshop will not be during the UBO Conference, but will be tied to the IADC Well Control Technology conference in Galveston.

Upcoming Conference-
Lisa Teel gave an update on the upcoming IADC UBO/MPD Conference, and also asked that the 2016 meeting place be picked. Locations offered were New Orleans, Austin, San Antonio, Calgary, and Denver. There were also discussions about a name change, to include DGD into the conference name, but it was concluded that DGD is a part of MPD.

Answer needs to be given to Leesa by meeting end.
It is planned to be covered in the agenda.

She is still looking for Keynote speaker for conference in Dubai. Asked for any nominations please be submitted to Martin.

- **HSE Subcommittee – CJ Bernard & George M**

No current initiatives. There was a discussion on incorporating risk management type approach to HSE guidelines.

- **Training Subcommittee – CJ Bernard & George M**

George states that the MPD Fundamental Training material is ready for committee review and ballot and needs to be actioned before next meeting.

- **Outreach Subcommittee – Brian & Mike VDS**

Martin pushed for more Drilling Contractors to attend and asked that the outreach group push for more involvement.
David P. asked new attendees to discuss how they found out about the committee, so that they could come up with new techniques to promote.
Cameron, BSEE and BP reps presented how they found out about the committee.

- **Well Control Liaison – Charlie Orbel / Earl Dietrich**

Earl has attended the last few meetings. Most of the materials covered, were related to training, and need to be finalized. They may not be open for new focus areas. Holly suggested that agenda topic items, be sent to Chairmen, for future agendas.

IADC Well Control Committee Initiatives
Paul Sonnemann with SafeKick, gave a presentation on Well Control Committee current initiatives, including "gas in riser" issues. There was discussion about WC Guidelines in handling gas in riser, and proper control techniques:

- Examples were given on areas that should be a high priority between MPD committee and the Well Control Committee.
- He believes that RGH techniques should be brought to standards, and that training should be given to all groups. It is not on the radar for actions. He asked for participation in his sub-committee (Gas in Riser), and to explore the writing benefits of RGH systems, and help to develop procedures etc.
    - John K asked that LSU get involved, so that any course content being developed, could be peer reviewed.
- Per B. offered info on Statoil's research and experiences dealing with RGH.
    - Oscar (Blade) also offered to provide additional info on the same.

Martin mentioned that past involvement with the Well Control Committee, was to provide info on MPD equipment only. It was not asked to cover MPD and Well Control in DW operations.

Paul will liaise with WC Committee going forward, to get RGH into their RP development.

MPD 92M subcommittee will discuss and come up with a plan, to incorporate gas in rise, into the subsea stack backpressure.

The committee will discuss with IADC rep (Brenda or other) about setting up a meeting with WC Committee to discuss above.

- **Regulatory Liaison Subcommittee – Per Cato & George M**

George M – In September 2013 came up with flow chart of who to contact with BSEE in relation to MPD.
George will send to Holly to get it posted to website. Flow chart to contain generic positions only not names of individuals.

- **Class Certification Task Group – CJ Bernard**

CJ gave a quick update on what activities have been conducted. DNV has not responded to past offers, to assist in further revisions and clarifications.

ABS held a meeting on December 8th to show the current document, and to discuss comments that were provided.

Deliverables from the group were discussed and ideas were proposed:
- o Investigate development of a road map on classification requirements.
- o Provide harmonization between DNV and ABS, and/or look at GAP analysis between the classification processes. An idea would be, to develop a bridging document on the differences if possible, between DNV and ABS, or at least guidance on the differences.

We will revisit the past responses from DNV, during breakout, and report back to group. We will also discuss future deliverables and plan forward.

- **API16RCD Subcommittee – Martin C**

Martin provided a quick recap of the last meeting and stated that the changes submitted to API have been provisionally approved. There are comments that the group needs to review, rationalize replies. It will need to be resubmitted to API to close the doc and send out.

Lunch

Upcoming Committee Meetings schedule

Discussion on dates and sponsoring for upcoming committee meetings resulting in the forecast below:

Meeting	Dates	Location	Host / Sponsor	Confirmed?	Tie-back
1Q 2015	Feb 10-12	Houston	Weatherford	YES	-
2Q 2015	Apr 15-16	Dubai	MPO / Blade	NO	MPD/UBO Conference
3Q 2015	Aug 24-26*	Houston	IADC / Halliburton	NO	DGD Workshop 27th –Well Control Conference
4Q 2015	Dec 8-10	London	MPO	YES	-

Martin thanks sponsors for their support of this meeting – Shell and IADC

Nomination of Chairpersons for 2015

The open process for nominating and selecting 2015 Vice Chairperson was followed and three members were nominated. Each of the candidates gave a background resume before voting was conducted. Voting results as follows:

Vice Chairman
Per Cato Berg – Vice Chairman elect for 2015
John Kozicz
Frederic Jacquemin

Sub Committees

UBO
Mike Vander Staak will take on the UBO Subcommittee Vice Chair.

MPD
John Kozicz will take on the MPD subcommittee Vice Chair.

DGD
Iain Sneddon will take on the DGD subcommittee Chair and Dale Straub the Vice Chair position (Dag volunteered as alternate)

HSE & Training
Oscar G (Blade) "HSE & Training" (pending).

Class Certification Task Group
CJ Bernard will stay on as Class Certification Chair.

Outreach
Motion to dissolve Outreach Subcommittee by David Pavel and seconded by John K.
Approved ---- Outreach subcommittee dissolved.

Regulatory Liaison
Earl Dietrich

Well Control Committee Liaison
Paul Sonnemann and Charlie Orbel will participate in Well Control Committee and provide feedback.

API 16RCD Task Group
Martin will stay on as 16RCD Chairman.

API Document Liaison
Sara S will take on the role.

New Business
Martin asked about new business.

1. Petrobras asked that FMC be added to Future Work. It will be included and voted on by the committee.
2. John suggested that we change name to Light Weight Mud Cap Drilling. Discussion ensued but no formal vote taken on the subject.

Next was a presentation by Jay Bruton from ABS on the status and way forward, for their MPD classification doc.

He asks that all comments on the draft doc be submitted by years end. There will potentially be another doc review session, with the committee, at the Feb 12 Houston meeting.

Coffee Break

The Well Control Committee signup sheet was passed around for members to sign up to participate in the committee going forward.

Break Out Groups
Committee work over the next two days is identified as:

- Class certifying breakout will be conducted by Earl D on Thursday.
- 16RCD will Breakout on Wednesday and Thursday.
- MPD will Breakout on Wednesday and Thursday.
- DGD will breakout on Wednesday.

Members asked to get copies of the PMCD draft doc, for their review, and there were discussions about whether or not to do it. It was approved, to send out copies for members to review, and that a vote for approval would be done on Day 2.

2016 MPD/UBO Conference venue
A vote was conducted for the possible venue of the 2016 UBD/MPD Conference. As Dubai is the venue for 2015, a North American city is suggested for 2016. The vote results in a tie:

New Orleans	Tied
Calgary (Banff)	Tied

Leesa Teel (IADC) to look at venues and compare for best value and vote again.

Meeting adjourned for the day.

DAY 2 - Thursday December 10th 2014

Welcome, Announcements & Safety Moment

Martin Culen opens the second day at 08:00. Mike Vander Staak was nominated as the new minute taker.

Discuss the Dubai conference and remind people to submit papers, prior to a draft date of 22 December. The final manuscript needs to be submitted by January 13, 2015.

Martin has determined that the breakout sessions will be, 16RCD, PMCD, DGD. The certifying authority, may be addressed on Thursday, with the return of CJ Bernard.

Martin expressed a need to gain committee wide acceptance for the current PMCD with the Subsea BOP document.

PMCD Best Practices Document
Per Cato Berg takes the floor with the current document. Just over one year ago, in Frankfurt, the document was started. Individuals have contributed to the sections and meetings have been held each session to work the document. The document has been sent out to the group where ~ 50 comments were tabled. All comments were closed out via WebEx meetings and teleconferences.

The next step is to forward the document to the API committee. Per Cato feels like the document is ready for this step now.

Per Cato has asked, if there were any people who have an issue with the document, prior to sending the document to API.

Paul Sonneman has voiced some opinions that the document is clearly written by several people. There are two specific concerns; the first concern is related to the consistency of the wording and the references used. An example of this is in section 10, from the current document, as listed below:

Engineering and Design

Candidate Selection Criteria

PMCD may be considered when conventional circulation is impossible, impractical, or undesirable.

1. If the well is expected to have total losses or high loss rates; PMCD should be considered. The most common application of PMCD is to address the situation of total or high loss rates that cannot be readily corrected with LCM.

2. Wells with high H_2S content and available formations amenable to fracturing. Since no formation fluid is brought to surface during PMCD operations it is especially appropriate for use in formations with a high H_2S content. In some situations, it has been advantageous to intentionally fracture such formations and drill using PMCD to avoid the possibility of exposing personnel to potentially dangerous conditions.

3. Wells with formation cross flow and drilling fluid swapping. PMCD may provide a way to safely secure a well that has encountered conditions where two formations with differing pressure regimes are inadvertently exposed resulting in downhole crossflow (sometimes called an underground blowout). It does not stop the crossflow from occurring but it can isolate it from the surface thus making it safe for personnel and surface equipment and allowing time for measures to be brought to bear to address the situation.

4. Extremely narrow operating window as a result of a kick. Situations can develop, especially in deep water, where the friction pressure required in order to circulate out a kick conventionally can result in an ECD greater than the previous casing shoe FIT/LOT making it impossible to circulate the kick to surface. PMCD may allow the influx to be forced back into the formation and drilling to continue safely.

The discussion includes, if we do we want to expose ourselves to an API edit, that would clarify some clear concerns that he has. He asked if they would like to take some of the group's time, to review the comments and recommended changes, that they may have. Martin Culen has estimated, that the various writing styles will be rectified, with a technical writers review. He has stated that the technical components are the critical components. Paul has detailed methodology that is incorrect, and also described the Weight and Wait method, being described incorrectly. Paul has concern about the inconsistency with the maintenance of the downhole condition, described in the current form of the document. Martin has described the bottom hole conditions in 92U, as a more holistic application of the information. He has asked the authors to explain, if there is an overarching statement to define the PMCD envelope, regardless of the fractures and bottom hole conditions. We need to identify each independent candidate selection area, this is located in section 10, engineering design. Paul is stating that the document says,

that any well can be drilled using the PMCD, and that there is little engineering involved. Dennis Moore describes that the wells can be in fact drilled MPD in some form. Sara has described the need for the introductory section to describe the differences between applied back pressures versus PMCD. Paul states that blind drilling is not PMCD. Martin has discussed the various types of MPD such as mud cap, DGD etc. as part of the MPD envelope. The committee is trying to describe each of the various types in the sections of the documents.

Paul's second comment was more to do with the incorrect description, of the well kill methods described, in the current document. The description described below is not consistent in the opinion of Paul;

Transition from PMCD to Conventional Drilling

If the calculated static downhole pressure stabilizes at a level that is equal to or higher than the pressure the wellbore will be exposed to with balance weight mud plus ECD plus a normal safety margin (e.g. 0.2 ppg) then conventional drilling can be resumed without losses. In this case, the objective is to maintain BHP above formation pressure while displacing the hole with kill weight mud. Basically the same procedure is followed as with the Weight and Wait method of well control. A standard kill sheet may prove helpful. Generally the procedure is:

1. Close the well in at the BOP and line up to take returns up the choke line.
2. Prepare a sufficient volume of kill weight mud.
3. Prepare a drillpipe pressure schedule for displacing the drillpipe with kill weight mud.
4. Hold casing pressure constant while bringing the pump up to the desired speed.
5. Use the choke to control drillpipe pressure and follow the prepared pressure schedule for displacing the drillpipe.
6. Once the drillpipe is displaced, hold drillpipe pressure constant until the wellbore below the BOP and choke line are completely displaced and kill weight mud is being returned to surface.
7. Confirm that the well is stable i.e. no gains or losses.
8. Displace the riser with kill weight mud using the boost line.
9. Confirm a stable wellbore.
10. Open the BOP and resume conventional drilling

The reference is not following the standard well control described in well control practice. It has been determined that this section highlighted areas that need to be reviewed.

At 09:20 a break has been called, and it has been determined, that there is a requirement to break out into groups. There are still some issues that need to be worked in the current section of the document. 16RCD will convene in the other conference room and DGD has broken out as well.

PMCD RP Breakout Summary

- Section 10.5.2 – Move the sentence underlined. It has been moved to the Engineering design section 10.3.2.1 and reworded. ***"For example, the most common application of PMCD is a single, continuous, fractured carbonate interval that is in hydraulic communication from top to bottom".***
- Section 10.3.8 – The sentence herein is inconsistent when using the terms stripping and tripping. An example of this is; "***When tripping out, annular mud is pumped down the annulus to replace the pipe removed as it is pulled, thus keeping the hole full and maintaining the status of the well. Since the annulus is under pressure a typical trip tank cannot be used. Instead, the rig pumps are used. This sentence indicates that the operation is stripping versus tripping".*** There needs to be consistency in the terms stripping and tripping. A word search has been done in the document and changes have been made.
- Table 6 and 7 are under review it is important that the tables are considered examples and not the prescriptive application. It has been determined that there is sufficient wording in the document, to ensure that the user understands, that these tables are examples.
- Recommendation to add definitions for some specific terms used in table 7. Some terms were completed in the table itself, and others were added to the definitions section (section 2.2), in the main document.
- There was a challenge on the current definition of LAM in section 2.2 and is observed as being vague. The definition was modified to the mutual satisfaction of the members.
- The addition of statically underbalanced has been made into the definitions section 2.2 in the document.
- Chapter 3 section 3.2 hydrates, has reference to recommended actions, that may not be acceptable to all the applications. Dag V would like to remove all **but** the last sentence in this section. This point was agreed to, and all but the last sentence, has been removed from the Hydrates Section 3.2. Point closed out by Per Cato.
- Section 7 control systems – The following sentence refers to the term flow rate which has been replaced in the document as pump rate. "***In PMCD some similar data points that are measured in a CBHP control system would be applicable for the operation, i.e. annular pressure, stand pipe pressure, flow rate, pit volume", mud weight.***
- Page 27 - Table 3 contains a reference to "tripping into a live well" – It was challenged that this wording should be removed. After a discussion, there was no change to the wording, in the current document.
- The question was asked if the term "cross flow" needs to be defined in either section 2.2 (definitions) or in Table 3. Following conversations, the group determined, that no change in the document wording or definitions was required.
- Page 27 – section 8.7 Drilling Fluids - Referring to the sentence "***It can be advantageous to balance or kill the well without displacing the entire system to another mud weight (e.g. balancing the well to trip without closing the blind rams). This can be accomplished by bullheading a partial column of much heavier mud into the well increasing hydrostatic***

pressure of the entire mud column sufficiently to offset existing annular pressure". The argument was raised that in many PMCD wells you cannot kill a well simply with a fluid system. Changes have been made to the wording in this section pertaining to the sentence described.

- Page 13 – section 4.5 Riser analysis and preparation – Challenge the API references, as there is a lack of the reference to API S – 2RD. This reference has been added to the document to include API-S-2RD this has been added in three places.
- Page 33 – 10.2.3.4 – References to volumes of kill mud that would put the well on vacuum, and the description of a particular set of conditions, to balance to the top or other fractures. The sentence that is being challenged is as follows; ***The formation fluid in the mixture is lighter than both the sacrificial fluid and any annular mud that may now be below the top fracture so will migrate up while the more dense fluids will go down due to gravity and be forced into the lower fractures due to the overbalance of the mixture.***. The final solution to the wording of this section, is to add the term NOTE to the beginning of this last paragraph, and the remainder of the section has been left as is.
- There were several references, during the planning of PMCD operations, and it was noted that the use of NRV is critical. It has been observed that there should be more attention to testing and recommendations for the operation of NRV's. Per Cato highlighted that the NRV descriptions and recommendations are included, in detail in several places, and therefore the comment was rejected.
- 10.12 page 49 reads as follows; "***When PMCD operations are conducted correctly, there is no circulation to surface and there should be no gas to surface, so gas handling should not be an issue. In case of an equipment or other failure it may be necessary to remove and handle a limited amount of gas. Contingency procedures should be in place to deal with gas in the wellbore that cannot be removed by bullheading."*** The highlighted wording suggests, that gas handling should not be an issue, which is not correct. Some wording has been modified in the current document.
- A question was raised concerning the term "top fracture". There is some discussion that "top loss zone" pertaining to PMCD may be used in its place. Per Cato has reviewed the document to evaluate the wording from top fracture to the top loss zone. The top fracture has been determined to be the correct terminology and no wording has been changed.
- Page 45 - Tripping with a balanced well – 10.3.8.4 – Paul would like it to be clear, that he is not entirely in favor of the section, as it stands now. The wording has been modified slightly, to ensure that we are showing an example of the procedure, but that the procedure suggested is not the only tripping mechanism.

Per Cato has closed the review, the PMCD document will be voted on after lunch, to see if the document can be sent to the API committee.

Lunch was from 12:00 – 13:00, sponsored by Shell.

Martin reconvenes the session after lunch at 13:00.

Martin takes a moment, to solicit the opinion of the committee, for a choice of Key Note speakers for the Dubai conference - Kevin Wise of Boeing. Kevin is involved in the design of an automated MPD controller. There are no issues with approaching Kevin as a presenter, in fact, this was encouraged. Martin will look at discussing this with Kevin to attend as the key note speaker for the Dubai conference.

The minutes of the PMCD breakout group were reviewed and a motion made to vote to pass this along to the API.

The vote to send the PMCD document to API in its current form passes.

Sara has requested that anyone who wants to be a part of the API meetings, can leave their name with her, and she will make sure that you get invited to the meetings.

The PMCD is a standalone document and work should start, on the other documents, now that the PMCD has been sent to API.

13:40 – Break out into work task groups, API 16RCD and MPD.

Sara led the section regarding the combined document. The next section will be as highlighted in the table below (Applied Back Pressure – Subsea BOP Stack);

Applied Back Pressure	
Surface BOP Stack	**Subsea BOP Stack**
1. Scope 2. Terms, Definitions & Abbrev 3. MPD objectives & types 4. Drillstring 5. Training 6. Drilling Fluids 7. Control System 8. Planning & HSE 9. Surface Equipment 10. Well Control 11. Engineering & Design 12. Operational Procedures 13. Standard References	1. Scope 2. Terms, Definitions & Abbrev 3. MPD objectives & types 4. Drillstring 5. Training 6. Drilling Fluids 7. Planning & HSE 8. (RPMCD SS) Marine Equipment (John & Gavin) 9. (RPMCD SS) Environmental Considerations (John) 10. Control System 11. Surface Equipment (Earl D) 12. Well Control (Per Cato) 13. Riser Gas Handling (John, Paul, Dag V) 14. Engineering & Design (Petrobras, ABS) 15. Operational Procedures (Petrobras) 16. Standard References (Sara)
PMCD	
Surface BOP Stack	**Subsea BOP Stack**
1. Scope 2. Terms, Definitions & Abbrev 3. MPD objectives & types 4. PMCD Types 5. Drillstring	1. Scope 2. Terms, Definitions & Abbrev 3. MPD objectives & types 4. PMCD Types 5. Drillstring

6. Training 7. Drilling Fluids 8. Control System 9. Planning & HSE 10. Surface Equipment 11. Well Control 12. Engineering & Design 13. Operational Procedures 14. Standard References	6. Training 7. Drilling Fluids 8. Control System 9. Planning & HSE 10. Marine Equipment 11. Control System (specific to subsea) 12. Environmental Considerations 13. Surface Equipment 14. Well Control 15. Engineering & Design 16. Operational Procedures 17. Standard References

Sara has described that many chapters, have different tables of contents, due to the various operational an equipment differences. Looking for volunteers to help populate various section of the next document, they are noted on the section above.

At 14:15 Sara has broken the MPD subcommittee out into 2 groups. Group 1 will look at sections 1 – 7 and the second group will look at 8, 9, 10, 11, and 16 in the Applied Back Pressure – Subsea BOP Stack document.

In the task group that is discussing Chapters 1 through 7, the first discussion was pertaining to how to prepare the next document. The way ahead is to complete Applied Back Pressure Subsea BOP Stack; this will be completed as a standalone document. Once complete, the plan is to combine this section it with;

1. API - 92 M (Applied Back Pressure – Surface Stack) completed and out for ballot, and
2. PMCD – (Subsea BOP Stack) completed December 10, 2014

This will be completed and submitted all together with the three documents under the new API form. We will then identify that the final section PMCD – Surface stack would be pending.

15:05 – Begin to work on the sections.

16RCD Breakout Summary

Spend some time in the morning to discuss the modifications to 16A and how that affects 16RCD. The remaining time was spent working through the list of 99 comments, which were submitted on the balloted 16RCD, which has been voted on. They managed to work through a number of the questions today and will finish up on day three.

DGD Breakout Summary

The breakout session was completed by 10:45 am.

Participants: Dale Straub, Iain Sneddon (via conference call), Ahmet Duman, Dag Ove Molde, Frederic Jacquemin

- **Administration:**
  - Confirmed Iain Sneddon as Chairman of the DGD subcommittee for 2015.
  - Confirmed Dale Straub as Vice-Chairman of the DGD subcommittee for 2015.

- **DG15** - DGD Well Control workshop Thursday Aug 27th 2015:
  - Reviewed agenda, confirmed speakers, and speakers pending confirmation and /or alternate.
  - Debriefed with Leesa Teel and requested 3 breakout rooms for morning and afternoon sessions.
  - Frederic J. (or alternate) will attend Well Control conference paper selection meeting in Feb 2015, to present them the DGD well control workshop agenda.

- **Initiatives/directions for 2015:**
  - Finalize workshop speakers, followers. Deadline Q1 committee meeting Feb 2015 in time for brochure release.
  - Review and update educational material currently displayed on DGD subcommittee webpage.
  - Decide format, tag along strategy, and start preparations for DG16 workshop.

At 15:30 the various task groups came together, in the main meeting room, to close out.

Meeting adjourned by Martin at 15:45

DAY 3 - Thursday December 11th 2014

08:00 – Breakfast sponsored by Shell

08:30 - Opening remarks from Martin Culen. Quick summary of the previous day's events, including the continued work required by the 16RCD task group, the DGD update on logistics, and the two break out groups for the Applied Back Pressure with Subsea stacks.

08:45 – Break out into three groups.

11:30 – Reconvene with the entire group.

16RCD Breakout Summary

- They were able to finish the technical comments and resolve them. There are 60 general and editorial comments remaining. **Action** – divided the comments amongst the various task group members to resolve. Feedback should be given to Martin by January 9th. On January 15th there will be a web conference to finalize all the replies. The final versions should be ready to go back to API the following week, if there are no outstanding issues. If the comments are not substantial, the document may have to be voted on again, if not the document will be sent out and distributed.
- Work the test methods for the 16RCD – **Action** is for this to be tabled in the first IADC meeting in 2015.

Applied Back Pressure Subsea BOP Stack Sections 1 – 7 Summary

- Complete a review of chapters 1 through 7 as a first draft.
- Pull together the table of contents.
- **Action** – Get the most recent API 92M sent to us from the API group.

Applied Back Pressure Subsea BOP Stack Sections 8 – 12 Summary

- Work section 8 with four outstanding pages.
- Section 9 should be transferable; remaining outstanding is 10, 11,12.
- Made some modifications to the outline.
- **Action** - Have a WebEx the last week of January (proposed the 27th of January 2015 07:00 Houston Time) – Sara will be responsible for organizing the web ex.

12:10

- Close out the planned second quarter meeting for the 17th of April 2015.
- **Agreement** – It is intentional that the committee meetings are only 2 days, versus 2.5 days in Dubai, due to having the conference earlier in the week.
- David Pavel thanked Martin Culen for his efforts, over 2014, as Chairman of the IADC committee.
- The meeting was adjourned for Q4 in Houston, Texas.
  There was a motion to adjourn – Paul Sonneman, seconded by Stewart Wilson.
  Meeting adjourned.

Appendix 1: Attendees List

Name		Company Name
Jay	Bruton	**AMERICAN BUREAU OF SHIPPING (ABS)**
Harish	Patel	**AMERICAN BUREAU OF SHIPPING (ABS)**
Craig	Weems	**AMERICAN BUREAU OF SHIPPING (ABS)**
Martin	Culen	**BLADE ENERGY PARTNERS**
Anton	Kozlov	**BLADE ENERGY PARTNERS**
Oscar	Gabaldon	**BLADE ENERGY PARTNERS**
Christopher	Scarborough	**BP**
Jeff	Dull	**BSEE**
Nate	Smith	**CAMERON**
Glenn	Johnson	**CAMERON INTERNATIONAL CORP**
Dale	Straub	**CHEVRON**
Simon	Ouyang	**DNV-GL**
Tony	Worthen	**DRILL COOL SYSTEMS INC.**
Roger	Stave	**ENHANCED DRILLING**
Ahmet	Duman	**GE OIL & GAS**
Joseph	Karigan	**HALLIBURTON ENERGY SERVICES**
Christopher	Bernard	**HALLIBURTON ENERGY SERVICES GROUP**
Isabel	Poletzky	**HALLIBURTON ENERGY SERVICES GROUP**
Tim	Woodliff	**HAWK VALVE**
Mike	Vander Staak	**HESS CORPORATION**
James	May	**MANAGED PRESSURE OPERATIONS (MPO)**
Austin	Johnson	**MANAGED PRESSURE OPERATIONS (MPO)**
Andrew	McNeill	**MANAGED PRESSURE OPERATIONS (MPO)**
Charlie	Orbell	**MANAGED PRESSURE OPERATIONS (MPO)**
Dennis	Moore	**MARATHON OIL COMPANY**
Dag	Vavik	**MH WIRTH**
James	Lins	**M-I SWACO**

Ron	MacInnes	**M-I SWACO**
Jaye	Shelton	**M-I SWACO, A SCHLUMBERGER COMPANY**
Juan	Beltran	**M-I SWACO, A SCHLUMBERGER COMPANY**
Bastiaan	Liezenberg	**MI-SWACO- DYNAMIC PRESSURE MANAGEMENT (DPM)**
Thomas	Jackson	**NATIONAL OILWELL VARCO**
Roberto	Zerkowski	**NATIONAL OILWELL VARCO**
Jim	Nowotny	**NOWOTNY CONSULTING LLC**
Andrew	Westlake	**OCEAN RIG**
Sean	Nichols	**OIL STATES PIPER VALVE**
Frédéric	Jacquemin	**PACIFIC DRILLING**
Alexandre	Diab	**PETROBRAS**
Guilherme	Vanni	**PETROBRAS**
Emmanuel	Nogueira	**PETROBRAS**
Ken	Downs	**PRUITT TOOL & SUPPLY CO**
Jason	Shaffer	**PRUITT TOOL & SUPPLY CO**
Paul	Sonnemann	**SAFEKICK**
Helio	Santos	**SAFEKICK**
Sara	Shayegi	**SHELL E & P COMPANY**
George	Medley	**SIGNA ENGINEERING CORP**
Per	Berg	**STATOIL**
John-Morten	Godhavn	**STATOIL**
Dag	Molde	**STATOIL AS**
Gavin	Humphreys	**STENA DRILLING**
Stewart	Wilson	**STRATA ENERGY SERVICES**
Yigal	Cohen	**THE CROSBY GROUP**
John	Kozicz	**TRANSOCEAN**
James	Chambers	**WEATHERFORD**
Earl	Dietrich	**WEATHERFORD UNITED STATES**

David	Pavel	**WELLING & COMPANY**

Appendix 2 – MPD/UBO Committee Document Status

Document Title	Custodian	Status	Date

Appendix 3: Action Item Tracker snapshot as of

MPD/UBO Committee Action Tracker						
#	**Assigned To**	**Issue**	**Action**	**Initiation Date**	**Desired Completion Date**	**Status**
1	API Liaison	We are not working from the most recent version of API-92 M	The committee will have to get the newest copy 92 M from the API for the next meeting.	December 11, 2014	Prior to the next IADC Committee meeting	Open
2	2016 Venue	Venue for 2016	Determine Banff, and New Orleans			
3	IADC Chairman Meeting	Getting together with other Chairs contact Leesa Teel with IADC				

IADC	**IADC UBO & MPD Committee Meeting**	**2nd Quarter Meeting April 10-11 2014 Madrid, Spain**

MPD/UBO Committee Action Tracker						
#	**Assigned To**	**Issue**	**Action**	**Initiation Date**	**Desired Completion Date**	**Status**

Closed action Items
