Minutes of Meeting

2009 Exploration & Production Standards Conference on Oilfield Equipment and Materials Meeting
Tuesday, June 23, 2009
Drilling Well Control Equipment SC16
8:30 am – 12:00 pm
Chair: Mel Whitby

1. INTRODUCTIONS AND ATTENDANCE SHEET

Meeting attendees introduced themselves. Record of Meeting Attendance is included in the minutes.

2. APPROVAL OF AGENDA

The agenda was approved as read.

3. APPROVAL OF MINUTES FROM JANUARY MEETING

The minutes were approved as read.

4. SC 16 DOCUMENTATION REVISION STATUS

16C: Choke and Kill Systems (TG1) - David O’Donnell

- D. O’Donnell will send out the resolution draft and move forward with the ballot.

16Q & 16R: Marine Drilling Riser Systems (TG4) – David B. Lewis

- List of 10-12 Engineers established to participate in API RP 16Q and RP 16R revisions
- API 16R maps to ISO 13625
  - Riser Connections - No ongoing API efforts are underway
  - API 16R has been written in ISO format and was issued as ISO 13625. Therefore, ISO 13625 and API 16R are basically identical documents.
  - Contacted a number of ISO 13625 and former API 16R folks and they state the short comings of the two documents are:
    - Bolting
    - material selection
    - mechanical properties
    - fabrication
    - quality control
    - coating and grease
  - Comment: SC17 has a similar list of changes as 16R. Instruction made to send SC17 documented list of changes to D.Lewis.

- API RP 16Q / RP 16K maps to ISO 13624-1 and ISO 13624-2
  - API RP 16Q Marine Drilling Risers – No ongoing API efforts are underway
  - ISO 13624-1 is at ISO stage 50.20 (FDIS ballot initiated) and ISO 13624-2 is at ISO stage 30.99 (CD Approved as DIS).

- Next Steps:
  - Review ISO 13624-1 and ISO 13624-2 to determine the differences with the current API RP 16Q and RP 16K (formally RP 2K) and report back to SC 16. If there is enough support, an ‘adopt back ballot’ will be conducted with API Executive Committee approval.
  - Get industry group together to discuss API 16R needs and report back to SC 16.
  - Based on these two reports to SC16, SC16 can determine if any API NWIs are necessary.

16D/ISO 22830: Control Systems (TG2) – Roland Goodman
• Task Group 2 Work Item is to review ISO 22830 for consideration to adopt and submit comments, if any to R.Goodman.

5. TASK GROUP AND FORMATION MEMBERSHIP

The following Task Groups listed below were either initiated or confirmed within this meeting. These lists are not all inclusive.

16A Drill-through Equipment (TG3)
• Chair - Kent Grebing, National Oilwell Varco
• Member – Tom Lambert, Control Flow, Inc.
• Member – Bruce Boulanger, National Oilwell Varco
• Member – Thomas F. Bailey, Weatherford Technology & Training
• Member – Kenneth Young, Stress Engineering Services, Inc.
• Member – Paul Meade-Clift, Ensign Energy Services, Inc.
• Member - Greg Childs, West Engineering

16C Choke and Kill Systems (TG1)
• Chair – David O’Donnell, O’Donnell Consulting
• Member – Tom Lambert, Control Flow, Inc.
• Member – Bruce Boulanger, National Oilwell Varco
• Member – Daniel Twiddy, Technip
• Member – Kenneth Young, Stress Engineering Services, Inc.

16D Control Systems (TG2)
• Chair - Brian Wright, CAD Control System
• Member – Dr. Andrew Jeffry, Nautronix PLC
• Member – Kenneth Young, Stress Engineering Services, Inc.
• Member – Ed Gaude, Cameron
• Member – Mac Kennedy, Cameron

16F Marine Riser Drilling Equipment (TG4)
• Chair – George Tisdale, National Oilwell Varco
• Member – Bruce Boulanger, National Oilwell Varco

16RCD Underbalanced Drilling - (Rotating Control Devices) (TG6)
• Member – Ken Malloy, Mohr Engineering Division
• Member - Thomas F. Bailey, Weatherford Technology & Training

RP 16Q & 16R Marine Drilling Riser Systems (TG4)
• Chair – David Lewis, Blade Energy
• Member – Bruce Boulanger, National Oilwell Varco
• Member – George Tisdale, National Oilwell Varco
• Member – Kenneth Young, Stress Engineering Services, Inc.

RP 16ST Coiled Tubing (TG5)
• Chair – A Sas-Jaworsky

6. TECHNICAL INQUIRIES – Roland Goodman

Three (3) Technical Inquiries were addressed and presented to the relevant Task Groups.

Q: Status of 16C Ballot?
A: Did not receive the draft. The draft will be resent to R.Goodman and sent out for re-ballot.

Q: What is the active life of an API document?
A: Documents are up for review every 5 years, some documents have been extended. If a document is not reviewed after 5 years, the Legal Department may title them as “document not active”, yet API asks them to remove the title since the document is still active even if it is not reviewed every 5 years. Revisions and replacements can be done before 5 years. Addendums can be issued to documents if they take years to complete, but API likes to limit 2 Addendums per document.

Q: What is the official API procedure for Technical Inquiries?
A: API will receive questions via the new website (operational July, 2009) and some sent directly to myself (R.Goodman). There are some questions that API cannot respond to officially. API can explain what a specification means or interpret requirements of the standard. API cannot provide recommendations, that is for a consultant to answer. When a question is received via email, all contact information is deleted and then sent to the appropriate API resource who can answer the question. All responses must be approved by API, so there are some legalities. The response comes from API direct, not myself (R.Goodman).

7. NEW BUSINESS

John Fowler, On-Line Resources, Presents review of SC 6A/ SC 17D in comparison to current SC 16A and SC 16C design requirements and recommendations.

- Items of interest include;
  - Change yield strength from SC6A; 16A – 90% yield test pressure and 16C – 2/3 yield Sm and 90 St
  - Need to include stress concentrations (Sc) in 16C
  - SC 6A, non-standard materials design requirements only include 45K, 55K, 65K materials
  - SC 6A Bolting, now we can look at bending membrane, stress in the bolts, plus limit strength (Sb = maximum allowed), but this does not include torque measurement

- High Point of Interest – 2007 Quality Control of Materials
  - SC 6A Meeting on June 18, 2009
    - Suggested Action: Do not use “Code” until charpy Quality Requirements are improved
    - API did “grandfather in” this document and stopped making the PSL 1 and 2 materials, yet the PSL 3 charpy issue still exists

- Action Items
  - API should review CVN requirements
  - Present J.Fowler’s information to API Executive Committee as SC 6A and SC 17D interface, for circulation and adoption into SC16A and SC 16C

Michel Grepinet, ISO TC64/SC4/WG2, 2009 Status Presentation

- Staff
  - Only 2 of 10 agreed to keep working with the group
  - Three new project leaders identified (control systems, diverter equipment for shallow gas, BOP’s for HP/HT drilling)
  - Drilling standards workshop organized in Paris under OGP umbrella
  - Creating of drilling standards network

- ISO TC67/SC4/WG2 Documents
  - Adopted
    - 13625 (2002) Drilling and production equipment – Marine drilling riser coupleings (API Spec 16R), ready for review
  - Adopted and/or in Process/Current Activity;
    - 13624-1 Drilling well control systems – Design and operation of marine drilling riser systems (API RP 16Q)
    - 13624-2 Drilling well control systems – Deepwater drilling riser methodologies, operations and integrity technical report
      - Current Status – Stage 50.00 FDIS registered for formal approval at 2009-07-02
    - 22830 Drilling and production equipment – Control systems for drilling well control equipment and diverter systems (API Spec 16D)
• Current Status – NWI (N414) closed 2009-03-18 to reinstate project as CD. Publication target date 2011. One (1) year for comments and improvements, common API/ISO document. Re-establish a work group for SC 16D review is primary focus for 2009.

• New project launched in 2009
  o 13354 – Drilling and production equipment – Shallow gas diverter equipment (API RP 64)
    ▪ Current Status – SWI (N417) closed on 2009-04-30. Asking for committee to help write the document
    ▪ The document is outdated and tells the story of disasters
    ▪ Concern regarding “recommended practice” wording and relation to API/ISO.
      ▪ Document will state you can do this/that such as, “do not put elbows in lines”.
      ▪ The new document needs to take stock of issues caused by RP64, set a standard, not a recommendation
      ▪ RP – does not go straight across into ISO
      ▪ Wording is VERY important; ISO uses shall, should and API mostly uses should in RP format
      ▪ A problem we have is that with the shall and should there is no jurisdiction or basis for enforcement
  o NWI is launched. A new project leader is found and moving forward. When the document is complete, it can be adopted into API
    ▪ Confirmed by R.Goodman RP64 is within SC16 scope
    ▪ Suggested Action; work together as a group (ISO/API) to create 1 final document for both

• Future projects launched (2009/2010)
  o Blowout prevention equipment systems for drilling HP/HT wells
    ▪ M.Grepinet with ISO defines HP/HT as anything = or > 15K
    ▪ MMS defines HP/HT as >15K, >350° F; look at MMS for verification
    ▪ Per 15K, API should get consensus with API
      ▪ It is both design, testing and materials to meet MMS requirements, scope and currently quality is not identified
      ▪ 16A does have petition for repair contention on 3rd edition
  o Well control operations and associated training requirements (API RP 59)
  o BOP and associated equipment repair and remanufacturing
  o Blowout prevention equipment systems for drilling hydrostatic wells (API RP 53)
    ▪ Hydrostatic Well is defined as pressure due to depth
    ▪ For 5K – 10K, not defined for 15K
    ▪ RP 53 - Operation, Test and Maintenance of BOP recommendations – setting up well control equipment
  o Blowout prevention equipment systems for drilling deepwater wells
  o Blowout prevention equipments systems for well servicing activities

Open Discussion
• Consider elastomers within SC16 scope
  o MMS expressed interest in elastomer ratings as well
  o M.Grepinet with ISO suggests to define what service they are good for and not good for
• Consider well integrity standard in API
  o OGP proposed, asking drilling companies to make a draft to ISO.
  o M.Grepinet with ISO, Due to this topic being so broad, it should be split in several sections and more clearly defined as to what you want and are looking at.
  o Contemplation of which group the topic would fall under in API; SC17 is said to have some aspects of it.
  o Action Item; Topic is taken as a Technical Query to decide where it belongs

8. NEXT MEETING DATES

SC16; January 27-29, 2010 in New Orleans, Louisiana
Defer to Task Group 1 – 6 Chairs to schedule meetings

9. ADJOURNMENT – 10:51 am
# Record of Meeting Attendance

**Group:** 3C-16 Drilling Well Control Equip  
**Chairman:** M Whitby  
**Meeting:** June ECS Mtg  
**Time:** 8:30-2:00pm  
**Date:** 6/13/09  

**Committee Members Should Make Changes to Their Personal Record on the Attached Roster. Visitors Adding Names to Roster Will Not Automatically Become Members of the Committee.**

Indicate BEFORE YOUR NAME if you are:
- (M) Member of the Committee in session
- (R) Representing a Committee Member (if so, state member's name)
- (V) Visitor – ONLY voting members or their Representatives may vote
- (S) Staff

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<thead>
<tr>
<th>NAME (Please Print)</th>
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**This Form Must Be Returned to the API Staff**

API standards meetings are open to all interested parties. By participating in the standardization process, you agree: (1) to fully comply with API’s policies and procedures governing standards, (2) that once balloted and approved by API, API shall have the sole and exclusive right to use any materials that are submitted by the participant for use in the standard, (3) you will not provide any material that will violate the rights of any third parties including, but not limited to, patents, copyrights, trade secrets, and trademarks, and (4) to disclose the existence of any patented technologies in the material that you provide.
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