

IADC Well Control Committee
Meeting Minutes
16th March 2016
IADC Crown Center
Houston, TX USA

Contractor roundtable

An informal discussion of drilling contractors was held prior to the Well Control Committee meeting. Key topics discussed included the following:

- Texas Railroad Commission clarifications to Rule 13
- BSEE report on Timbalier South incident and potential influence on BSEE final Well Control Rule
- Effects of temperature on fluid density
- Software modeling for more complex deepwater wells (possible presentation for future meeting)
- Expectations of Well Control Committee subcommittees: mission, current tasks
- WellSharp curriculum for MPD certification

Well Control Committee meeting

Welcome & Introductions

Chairman Aaron Mueller of Independence Contract Drilling was not able to attend the beginning of the meeting due to a delayed flight, so Ian Barker of Paragon Offshore (Committee Vice-Chairman) opened the meeting and welcomed the attendees. Steve Kropla of IADC provided a building safety briefing and reminded everyone the meeting was subject to the IADC Antitrust Policy and Guidelines. Mr. Barker asked those present to introduce themselves and their companies.

Proposed Revisions to API Standard 53

Ricky Cummings of Chevron (Chair of the API Standard 53 Work Group), gave a presentation on proposed changes and clarifications to the standard. He began by noting that the Standard 53 work group has been supported by a full spectrum of the industry. This includes operators, drilling contractors, OEMs, third-party consultants, industry groups and regulators comprising more than 60 different organizations.

He stated that three years following publication of the Standard, API still regularly receives requests for information (RFIs) from the industry asking for clarification of various provisions. The Standard 53 work group is now attempting to address the major items for which Interpretation requests and clarifications have been requested. This process could result in issuing an Addendum to the original Standard, or possibly issuing a 5th Edition if warranted by enough revisions.

Mr. Cummings said clarifications regarding Section 6 (surface BOP requirements) and Section 7 (subsea BOP requirements) have been driving the requests for an addendum to the document.

The group is currently reviewing these working to ensure consistency between the two sections. He said there has been some discussion over separating surface BOP requirements to distinguish between land, offshore, subsea, or shallow water. Overall the group would like to decrease the total number of requirements.

The workgroup has also started a BOP Testing Sub-Group led by Danny Fugate of BP. This group is working to clarify testing requirements and will also add stack "Hop" testing requirements.

Regarding other issues being considered, Mr. Cummings noted that design statements in Standard 53 currently refers to either a specific revision or no revision – which defaults to the latest revision. He said that now equipment shall be in accordance with specification documents that were in effect at the time of system manufacture. Later editions may be used for modifications or remanufactured equipment. He noted that the work group intends to review all design statements in the standard to determine which should be retained.

The workgroup also clarified the five-year major inspection requirements to define exactly when the five-year period starts. He noted that shear ram blades and retention bolts are to be inspected annually, but the revisions will allow for a condition-based maintenance philosophy.

The 4th Edition does not clearly state a closing time requirement for non-sealing shear rams. It is proposed that a requirement to close in 45 seconds or less closing be added. A similar requirement is proposed for non-sealing shear rams with an ROV receptacle.

Mr. Cummings stated that the work group will also review all informative statements throughout the document and determine whether they should be retained. He said a final review would focus on possible structuring of the topics.

He noted that a separate subgroup is working on design requirements for mud-gas separators, going into 16F under risers

In response to a questions training requirements, Mr. Cummings stated that Standard 53 does not deal with these, and that API RP75 would be the preferred document.

Alex Sas-Jaworsky questioned which international standards should be referred to in the WellSharp curriculum.

Brenda Kelly of IADC suggested that some standards should be identified in the curriculum as absolute requirements. She also suggested there be an interface between the WellSharp curriculum subcommittee and API standard workgroups to define what needs to be referenced.

Mr. Alex Sas-Jaworsky volunteered to assist in this task. Julia Swindle of the Center for Offshore Safety (part of API) said she would contact API's new vice president of Standards for API to convey the discussion.

WellSharp Update

Brenda Kelly provided an update on the current status of the WellSharp program. She stated that the Portuguese translation of the WellSharp test database is 90 percent complete and undergoing validation. IADC is currently in the process of contracting the Spanish, Mandarin, Arabic translations of the test database. Once additional languages are complete, students will be able to choose their preferred language from drop-down menu. She noted, however, that this could result in test proctors not being able to answer student questions in the language chosen.

Ms. Kelly also said that new metrics for both training providers and employers will be available soon. These include metrics comparing training provider experienced compared to industry

averages, and IADC member companies' access to records for their own employees. She noted the latter had been expressed as an important feature to a number of contractor companies.

She stated that key new developments underway include the Well Servicing curriculum and the instructor exam process.

For the Well Servicing instruction, , which is a joint effort by IADC and AESC members, four different work groups have been formed to develop the curriculum. These are meeting on a monthly basis. Curriculum for the Well Servicing courses is expected to be in draft form by August, at which time they would be published for a member comment period through September. She said she hoped the curriculum would be ready for launch by the end of the year.

Pilot testing of the Instructor knowledge exam is complete and it is anticipated the exam will be available in April 2016. Instructors are to test at the highest course/stack level for which approval is currently held or being sought. Ms. Kelly noted the test is comprehensive, and will require an instructor candidate to demonstrate essential knowledge for each course for which he/she is currently approved or seeking approval. Though the number of test questions has not yet been determined, the expected duration of the test will be about three hours. To qualify as a WellSharp instructor, candidates will need to score 85 percent or higher. The instructor tests, as with WellSharp tests, will be proctored.

Dates for this year's Facilitator certification courses have been set for May 2-5, June 13-16, August 1–4, Sept 12–15, and November 7–10.

Ms. Kelly held a meeting of WellSharp training providers following the Committee meeting to address some specific questions and concerns that came up during her presentation. Similar sessions will be schedule following future Well Control Committee meetings.

The group took a break.

Update – BSEE Well Control Rule

Peter Bennett of Pacific Drilling gave an update on the BSEE well control rule. He noted that a group of IADC contractors and staff had met in Washington DC the prior week to discuss their concerns over the rule with the Office of Management & Budget's Office of Information and Regulatory Affairs (OIRA). OIRA had received the final rule from BSEE on 3rd February, and at the time of the meeting was performing a final review.

Mr. Bennett recapped the history of the rule and industry's response. BSEE published proposed Well Control Rule on April 17, 2015, after working on it for nearly four years. Anticipating the rule for more than a year, industry trade groups, including API, IADC and OOC, initially formed seven work groups to review and comment on the proposed rule, with an eighth group added later.

The objectives of the Joint Industry Team (JIT) were to eliminate redundancy activity by the individual organizations to increase industry focus on critical areas of the proposed rule, to maximize involvement of SMEs, to increase time spent on rule analysis and assessment of impact, and to ensure the consistency of the messages from industry.

The rule, and the associated economic analysis, fails to acknowledge that individual contractors, not "the industry" and not operators will bear many of the costs associated with implementation of the rule with significant under-estimation of implementation costs for both equipment and inspections.

Peter detailed numerous meetings that had taken place in the past year between industry and the government prior to the contractor meeting with OIRA. These had included a one-hour meeting between API, OOC & IADC with BSEE Director Brian Salerno in July 2015.

There had also been a meeting with the House Natural Resources Committee requested by Chairman Bishop which Mr. Bennett felt was a very positive meeting with a good question and answers session. Mr. Bennett noted that the Deepwater Subsea Equipment Owners Group met with Senator Ted Cruz's Houston representative to express their concerns, though the group received no follow-up by the Senator's office.

Since publication of the proposed rule, among industry's numerous key concerns has been the requirement to maintain a 0.5 ppg drilling margin. He stated that based on this requirement, of 175 wells drilled post-Macondo, 110 of them could not have been completed.

Mr. Bennett stated that in addition to the drilling margin requirements, the industry remains concerned about proposed deviations from API Standard 53. These include the following:

- Surface & Subsea Accumulator Capacities
- All at once inspection of the BOP
- Hydraulic Locks on Surface Stacks
- ROV Intervention Functions
- Shear/Seal under flowing conditions
- Shear Sequences
- Testing
- Training and Qualification
- Gas bleed valve requirements
- Rated working pressure of BOP stack components must exceed MASP

Mr. Bennett also referenced an article in the *Wall Street Journal* on 9th February which was titled "Obama Administration to Tweak Proposed Offshore Drilling Rule." The article stated BSEE was planning to change the rule to add flexibility and make rule somewhat friendlier to oil and natural gas industry.

The article claimed that the final rule would be modified to permit phased 5 yearly maintenance system and to allow deviation from the 0.5 ppg drilling margin with adequate justification. Despite the generally positive tone of the article, however, Mr. Bennett noted that in meetings with BSEE and OIRA since its publication neither group would comment on any changes actually proposed to the final rule.

He noted that some reliable sources suggest that the final rule will no longer include the 1.5x volumetric requirements for accumulator capacities, will increase implementation times and also reduce ROV requirements. He said the final rule is expected to and more closely follow API S53 in other areas.

Mr. Bennett closed by stating that OIRA has 30-60 days to review or reject the rule before publication in the *Federal Register*. While some changes may be requested, rejection is not anticipated.

Subcommittee Reports

Curriculum Subcommittee – Gary Nance, Chevron

Mr Nance said group meeting on workover curriculum and snubbing, committee looking at coiled tubing, wireline and then looking at subsea aspects of well intervention. He noted the group is targeting August for completion of the well intervention curriculum. This will include identification of which positions need different levels of training.

Simulator Subcommittee -- Earl Williams Diamond Offshore - no report

Gas in Riser Subcommittee -- Paul Sonnemann, Safekick

Mr. Sonnemann reported that work on gas and riser topic has had lot of people involved since the topic falls between interests of the IADC UBO/MPD Committee and the Well Control committees.

He added that the UBO/MPD committee has been focused on the API 92X surface backpressure for offshore MPD issue, and as a result it has not focused on gas in the riser. That Committee feels the issue should really be handled by Well Control Committee. He said he felt that new work, field examples, and gas in risers that don't have MPD devices should be within the scope of the Well Control Committee, and that he is now looking for a home for work previous completed. Paul solicited suggestions on moving forward with ideas of the workgroup.

Robert Ziegler of Weatherford encouraged development of guidelines for riser gas handling to be handled by the Well Control committee. He noted that the workgroup had previously provided procedures it had developed to the group responsible for revising the IADC Deepwater Well Control guidelines. That group had reviewed the content but declined to include it in the latest revision.

Mr. Ziegler suggested the Committee publish this material as an SPE paper as a means of getting exposure to the material. He hoped that it could also be published as addendum to the IADC Deepwater Well Control Guidelines.

Brenda Kelly of IADC asked whether the gas in the riser procedures could be sent to IADC contractor members as a form of safety alert from WCC. Mr. Sonnemann said a potential problem with that the format for alerts tends to be very brief while this material is fairly voluminous. It was suggested that a workshop might be better suited for this purpose. Jay Bruton of ABS said he felt this was good idea.

Mr. Sonnemann indicated that while no action was taken he intended to raise it as a discussion item at the next meeting.

Barriers Subcommittee - Scott Randall, Plus Alpha Risk Solutions. - no report

General Discussion

Next Meeting

The next meeting of the Well Control Committee will be at IADC's Crown Center on Wednesday, 8th June. A contractors-only roundtable will take place from 08:00 to 09:00, with the full Well Control Committee meeting from 09:00 to 12:00. A forum for WellSharp training providers will take place immediately following the Committee meeting.

Mr. Mueller said he was hoping to be able to frame a more basic understanding of expectations of the Well Control Committee at the next meeting.

Upcoming IADC events

- SPE/IADC Managed Pressure Drilling & Underbalanced Operations Conference & Exhibition – 12-13 April, Moody Gardens Hotel, Galveston TX
- IADC Human Factors Conference & Exhibition 4-5 October, Moody Gardens Hotel, Galveston TX

 IADC Well Control Europe Conference & Exhibition – 19-20 October, Scandic Hotel, Copenhagen, Denmark

New business

PS discussed mud-gas separators, some work going on within API, might be better suited for addressing by WCC. Is there a need/opportunity for WCC to look at that topic and advise API work group.

Alex Sas-Jaworsky suggested that a representative from the API16C workgroup be invited to the next meeting. Robert Ziegler of Weatherford stated that he is currently writing a technical paper on mud-gas separators and he would be willing to discuss this at the next meeting. It was agreed to include this on the agenda for the June meeting.

Adjournment

The meeting was adjourned approximately 12:00 p.m.

Attendance

Name		Company Name
Jay	Bruton	AMERICAN BUREAU OFSHIPPING
Rutul	Mahida	AMERICAN BUREAU OFSHIPPING
Dave	Demski	ATWOOD OCEANICS
James	Knight	ВР
Melvyn	Whitby	CAMERON
Julia	Swindle	CENTER FOR OFFSHORE SAFETY
Byron	Sketchler	CHEVRON
Gary	Nance	CHEVRON
Ricky	Cummings	CHEVRON
John	Breidenthal	CONSULTANT
Chuck	Boyd	CS INC
Bhavesh	Ranka	CUDD WELL CONTROL
Clive	Battisby	DRILLING SYSTEMS (UK) LTD
Robert	Kemper	EXXONMOBIL
Johnny	Richard	FALCK SAFETY SERVICES
Andy	Erwin	FALCK SAFETY SERVICES
Bob	Burnett	HERCULES OFFSHORE
Phillip	Harris	HTK INTERNATIONAL
Steve	Kropla	IADC
Elfriede	Neidert	IADC

Marlene	Diaz	IADC
Alma	Roberts	IADC
Brenda	Kelly	IADC
Steve	Vorenkamp	IDS GLOBAL INC
Jane	Murphy	INTERTEK CONSULTING
Fenil	Shah	LEARN TO DRILL
Brian	Piccolo	MANAGED PRESSURE OPERATIONS
Laura	Murchison Ringler	MURCHISON DRILLING SCHOOLS, INC.
Jennifer	Fox	NATIONAL OILWELL VARCO
Peter	Bennett	PACIFIC DRILLING
lan	Barker	PARAGON OFFSHORE
Frank	Klepper	PETROLEUM COLLEGE INTERNATIONAL
Robert	Urbanowski	PRECISION DRILLING COMPANY
Benny	Mason	RIG QA INTERNATIONAL INC
Roger	Sanchez	RIG QA INTERNATIONAL INC
Victor	Fleming	ROWAN COMPANIES
Paul	Sonnemann	SAFEKICK
Alexander	Sas-Jaworsky	SAS INDUSTRIES, INC.
Chad	Lyon	SEVENTY SEVEN ENERGY
Marcus	Mason	SMITH MASON & COMPANY, LLC
Cheryl	Francis	STATOIL
Joshua	Robnett	SUBSEA SOLUTIONS
Evan	McLaughlin	TRANSOCEAN
Robert	Ziegler	WEATHERFORD INTERNATIONAL
Barry	Cooper	WELL CONTROL SCHOOL
Steve	Richert	WILD WELL CONTROL
Kevin	Braggs	XCEL SAFETY TRAINING SOLUTIONS