

IADC Well Control Committee Meeting Minutes 24 August 2015 Moody Gardens Hotel & Conference Center Galveston, TX USA

Welcome & Call to Order

Jason Morganelli of Ensco (Committee Chairman) called the meeting to order. A Facility Orientation/Safety Briefing was given by a member of Moody Gardens staff. Steve Kropla of IADC reviewed the IADC Antitrust Guidelines & Policies. Mr. Morganelli then asked all present to introduce themselves and company affiliation.

DeepStar BOP Shearing Technology JIP

Greg Kusinski of the Chevron/DeepStar Project provide a presentation on the background and goals of DeepStar and a one of their planned Joint Industry Projects on shearing technology which could be of interest to the Committee.

The DeepStar collaborative JIP work program provides members with technical and regulatory information. DeepStar's Phase XII comprises 12 Oil & Gas Operators more than 50 contributing member companies. DeepStar's mission and goals include investigating and framing the use of new technologies, developing and enhancing new and existing deepwater technologies, and gaining acceptance of deepwater technologies by regulators and the industry.

Mr. Kusinski gave an overview of the shearing technology JIP. The first phase will focus on identifying the capabilities of existing technology. The second phase will begin to examine new technologies. In the second phase, they are hoping for involvement by drilling contractors to help evaluate the feasibility of proposed new technologies on new and existing rig designs. Mr. Kuskinski noted an eventual possibility was the DeepStar work product being used as the framework by API for developing a standard.

Well Control Institute (WCI) Update

Mr. Kropla provided background to WCI and discussed what happened in the last board meeting following Moe Plaisance's previous presentation on WCI to the Committee. Mr. Plaisance, retired from Diamond Offshore, is the Chair of the WCI Board.

Mr. Kropla reviewed the priority topics identified by the Board: Competency; Safety management; BOP reliability; High reliability systems (barrier management and process safety culture); Well Control Incident Reporting; and Kick detection automation.

At the June meeting of the Board, WCI develop its first action Items based on the priority topics.

First, WCI requested that both IWCF and IADC document how they align with the original edition of IOGP 476, which recommended enhancements to well control training, examination and certification. Each group was provided with a template to complete this task. The outcome of this action item would be decided by the Board in a future meeting, but Mr. Kropla noted it could eventually result in official endorsement by WCI.

The WCI Board also sent a letter to BSEE Director Brian Salerno regarding the proposed Well Control rule. The letter expressed concern over certain aspects of proposed rule and encouraged the adoption of

performance based regulations. It also urged the Agency to use caution to avoid unforeseen circumstances

Mr. Kropla stated WCI will continue to monitor industry developments toward priority topics. It may endorse other efforts/programs (e.g., BOP Database). He noted the next Board meeting would be on3rd November in San Antonio.

IADC WellSharp Update

Brenda Kelly of IADC provided these WellSharp launch metrics:

- 74 WellCAP training providers had fully converted to WellSharp
- 41 providers were in final content review, all other review elements satisfied
- 5 programs had been voluntarily or involuntarily closed
- All providers training >1,000 people/year are launched or in final stage of technical review
- Only 5 WellCAP providers do not deliver drilling operations courses

She noted the target date for moving all providers to WellSharp was 30 September 2015.

The testing database allows for a number of metrics such as student performance by test question, course level, and training module/topic; instructor and training provider performance; and student and proctor survey results. Instructors may appeal (to IADC) any question that is deemed confusing or incorrect. Test questions are being monitored for potential issues every week and are being addressed by an assigned SME workgroup. Issues reported by students and proctors are investigated by IADC staff. The test questions in the database are currently only in English. The exams will be translated into additional languages over the next year, with Spanish and Portuguese versions first.

All new instructors and those renewing in 2015 are required to meet current criteria. Those who will be renewing in 2016 must meet all requirements at the time of their renewal.

The WellCAP Plus Facilitator course will satisfy the Train-the-Trainer (TtT) course requirement for instructors until further notice, as the TtT Accreditation Program is being developed. The TtT is expected to be launched in early 2016. The next available WellCAP Plus Facilitator courses are scheduled for Nov 2 – 5 and Dec 7 – 10. Contact Patty Tydings for details (patty.tydings@iadc.org).

The Instructor Exam has been created and will be piloted in Q4 2015. The test is comprehensive and the passing score is 80%.

Ms. Kelly discussed several issues that have arisen in regards to assigning proctors, including the logistical challenges and the time between entering the course in the database and Lloyd's ability to secure a proctor for the test. There are still a few areas in the world where it is difficult to find and employ proctors. In the event that a proctor is unable to be present during the exam, training providers may obtain emergency proctor codes to use to start and end the exam.

IADC has developed an "offline system" for taking the test, and this system will be available and piloted in early October.

IADC has made several significant changes in response to industry concerns, such as allowing an immediate retest for any students who is authorized to take the retest.

There have been several reported and investigated violations to test security. Instructors who are observed giving answers to students will receive one warning and will be suspended upon the second incident.

"Group of Seven" BOP Performance Database

Bob Blank of Noble Drilling and Chris Scheefer of CapGemini demonstrated a BOP failure reporting database that had been independently designed and commissioned by the Subsea BOP Executive Users

Group, informally know as the "Group of 7." CapGemini had been selected as the database developer and systems provider.

The dashboard/interface that contractors used to provide BOP performance data is built as a touch screen that allows users to view reports and submit reports. Different users see different options for reporting. As the dataset grows, It will increase in value. Users can see beyond their own reports, as appropriate. Data entry began in January 2015.

Incidents are sorted by sector, by region, by time period, by equipment. Users can see everything that is not proprietary. An important characteristic of the system is routing failure reports directly to the equipment manufacturer.

The group of 7 has been in discussions with the BOP Task Force of IOGP's Wells Expert Committee to use the failure reporting database as the primary platform for an Joint Industry Project which would include operators and OEMs as well as drilling contractors. Work is continuing on a legal agreement for funding and governance of the JIP.

Update on WCC Subcommittees & Workgroups

- Curriculum Subcommittee Gary Nance, Chevron
 Gary Nance reports that the Curriculum Subcommittee's work on the Drilling-Workover-Completion curriculum is now complete and that the Well Intervention curriculum now needs to be updated. He is looking to recruit new members for this effort. Email him at gary.nance@chevron.com if you are interested in helping with this.
- <u>Simulator Subcommittee Earl Williams, Diamond Offshore</u> There was no report from the Simulator Subcommittee.
- Gas in Riser Workgroup Paul Sonnemann, SafeKick
 Paul Sonnemann reports that his Gas-in-Riser Workgroup has been looking at basic behavior issues that were known about but not well understood. They now have a physics-based understanding of some of these issues. They are working on tackling these issues quantitatively. They are struggling on how to validate solutions. At OTC this year, there was a presentation on dual-gradient work in Norway, which provided some good numerical values on pressures, etc. This work is helping to validate some of the work the subcommittee is doing. Model experts, through a JIP, have been looking at the modeling capabilities and field-trial behaviors. No one has been able to replicate the gas behaviors, but they are getting closer to being able to validate these behaviors now. Mr. Sonnemann believes there is a great opportunity here for further research. Mr. Sonnemann believes this committee should take this on. Who should be responsible for deciding how and when to use gas handlers?

API is about to embark on a review of the mud-gas separator. Mr. Sonnemann believes the WCC should be looking at this because this committee is the most appropriate forum for that discussion.

 Barriers Workgroup – Scott Randall, PlusAlpha Risk Mgmt There was no report from the Barriers Workgroup.

Mr. Kropla concluded the meeting by noting two upcoming IADC conferences, the Well Control Conference in Galveston on the two days following the Committee meeting, and Human Factors Conference in Galveston on 21-22 October.

The next meeting of the Well Control Committee was set for 17th November but due to the inavailability of the Chair and Vice Chair has been rescheduled for Wednesday, 2nd December 2015 in Crown Center 1&2 at IADC Headquarters.

Attendance:

Name		Company Name
Eugene	Sweeney	ВР
Mark	Mazzella	ВР
James	Knight	ВР
Charlie	Holt	ВР
Brian	Wright	CAD CONTROL SYSTEMS, INC
Mike	Simpson	CANSCO DUBAI LLC
Michael	Schulenberg	CHECK-6, INC
Mark	Connolly	CHECK-6, INC
William (Bill)	Rau	CHEVRON
Scott	Schafer	CHEVRON
Gary	Nance	CHEVRON
Ross	Cazenave	CHEVRON
Greg	Kusinski	CHEVRON DEEP STAR
Joseph	Gomes	CHEVRON DEEP STAR
Bob	Sliva	CONSOLIDATED PRESSURE CONTROL
Chuck	Boyd	CS INC
Bhavesh	Ranka	CUDD WELL CONTROL
Nils Lennart	Rolland	CYBERNETIC DRILLING TECHNOLOGIES
Amar	Ahluwalia	DNV GL
Melissa	Aranda	DRILLING SYSTEMS (USA) INC.
Ed	Ramsay	DRILLING SYSTEMS (USA) INC.
Clive	Battisby	DRILLING SYSTEMS (USA) INC.
Wael	Abouamin	ENERGY RISK CONSULTING
Philip	Kuentz	ENERGY RISK CONSULTING
Jason	Morganelli	ENSCO PLC
Steven	Wilson	EXXONMOBIL
Johnny	Richard	FALK SAFETY SERVICES
Steve	Kropla	IADC
Elfriede	Neidert	IADC
Brenda	Kelly	IADC
Patty	Tydings	IADC
Steve	Colville	IADC

Mark	Denkowski	IADC
Michael	Arnold	INTERTEK
Kim	Laursen	MAERSK TRAINING
Paul	Herring	MAERSK TRAINING
Charles	Orbell	MANAGED PRESSURE OPERATIONS
Dag	Vavik	MHWIRTH
William	Murchison, Jr.	MURCHISON DRILLING SCHOOLS, INC.
Laura	Murchison	MURCHISON DRILLING SCHOOLS, INC.
Robert	Blank	NOBLE DRILLING
John	Bottrell	NOMAC DRILLING
Scott	Cooper	OCCIDENTAL OIL & GAS CORPORATION
lan	Barker	PARAGON OFFSHORE
Otto	Santos	PETROBRAS
Felipe	Terra	PETROBRAS
Frank	Klepper	PETROLEUM COLLEGE INTERNATIONAL
Tiffany	Klepper-Vasquez	PETROLEUM COLLEGE INTERNATIONAL
Hector	Moreno	RETIRED - HALIBURTON
Benny	Mason	RIG QA INTERNATIONAL INC
Paul	Sonnemann	SAFEKICK
Chad	Lyon	SEVENTY SEVEN OPERATING
Kimberlee	Adams	SEVENTY SEVEN OPERATING
Randy	Smith	SMITH MASON & COMPANY
Marcus	Mason	SMITH MASON & COMPANY
Kathleen	Francis	STATOIL
Bruno	Manfredini	TRANSOCEAN
Ed	Geissler	WELL CONTROL SCHOOL
Barry	Cooper	WELL CONTROL SCHOOL