

All meetings must have a written agenda that is circulated prior to the meeting. Attendees must strictly follow the agenda. Topics not on the agenda must be deferred until the next meeting. An attendee shall be assigned to record and distribute the minutes of each meeting. The minutes shall include a record of who attended the meeting.



Well Control Committee Meeting Minutes

15 May 2013

Host: IADC

10370 Richmond Ave., Suite 760, Crown Center 1-2
Houston, Texas 77042

Note: Action Items listed at end of Notes.

	<p>DRILLING CONTRACTORS' FOCUS MEETING <i>This session is open to drilling contractor members ONLY!</i></p>
7:00 – 8:00	<p>Dan Munoz, Transocean, Chairman</p> <ul style="list-style-type: none"> • Discussion Topics: <ul style="list-style-type: none"> ➢ Lessons Learned (group member) ➢ What keeps Rig Managers awake at night? ➢ What can the Well Control Committee do to help? ➢ What topics would you want to see on the next agenda? <p style="text-align: center;">Breakfast provided by Transocean</p>
	<p>WELL CONTROL COMMITTEE (All members)</p>
8:00 – 8:05	<p>Welcome, IADC Antitrust Guidelines & Policies Dan Munoz, Transocean, Committee Chairman</p>
8:05 – 8:10	<p>Facility Orientation/Safety IADC staff</p>
8:10 – 8:20	<p>Attendee Introductions Dan Munoz</p>
8:20 – 8:30	<p>Lessons Learned Ensure that company man and driller both understand that the driller (not the company man) has the ultimate authority on shutting in the well. No permission is needed. It is the driller's job to shut in the well when he believes it may be necessary.</p>
8:30 – 9:00	<p>WellCAP Advisory Panel Update Cason Swindle, Noble Drilling, Advisory Panel Chairman</p> <p style="text-align: center;">Update on the Well Control Institute (WCI) and moving forward: The Panel needs to move forward now rather than waiting for everyone else to be on board. OGP and IWCF are welcome to participate in the future. We are planning to hire a project manager (PM) and WCI Director. Recommendations are near completion. When finished, they will be turned over to IADC and then to the Well Control Committee (WCC) to produce the details to carry out the recommendations. The Standard applies to all personnel who may touch well control in any way (even in support roles), so all personnel will have some kind of training that is appropriate to their position. The Panel, taking a broad look at well control, is building competencies into the current Standard by defining what personnel need to know and be able to do. The Panel is also considering ways to keep the Knowledge, Skills, Abilities's (KSA) fresh by addressing retention. The rewrite of the Deepwater Well Control Guidelines will include</p>

training and drills, and need to ensure coordination with the Panel.
 Providers want a timeline for these changes so they can prepare for them. Changes at IADC are going to help facilitate the expansion. The goal is to have the whole Standard implemented by 2014. The new Standard for curriculum will come first because of the effect it has on everyone. Collaboration will be needed to implement the recommendations. As soon as the PM is brought on board, he or she will hire someone whose job it is to communicate with TPs. The technical substance of the changes will come from the WCC. Therefore, we will all know the progression of these changes.
 The WCC discussed issues regarding international acceptance of the Standard, which may not be universal at first. We expect some challenges. Our goal is to create something that is clearly the best, so its implementation will benefit everyone.
 We cannot allow this effort to die because it is so important. We are all affected by changes that will happen, whether they come from us or from someone else. This is a generational opportunity for us to set up a system/Standard that works for everyone. The WCC are the experts who will be driving this.

9:00 — 9:30

Review of Action Items from Previous Meetings
 Dan Munoz

1. *Submit ideas (solicit abstracts) for inclusion in this year's conference to Leesa Teel. (All members)*
 The conference will reflect the input from the WCC. The program is now complete, thanks to the input received from WCC members, No other info to report. **COMPLETED**
2. *Recruit new members (e.g., international) for the Steering Committee.*
 Encourage local and international O&G personnel to participate. (B.Kelly/D. Munoz) **OPEN**
3. *Obtain information on barriers. (Scott Randall, D. Munoz)*
 S. Randall surveyed the industry while at the Center for Offshore Safety (COS) Forum 2 weeks ago and spoke informally with a regulator. How do we define barriers? Conclusion: We need leadership on this issue, which could/should come from the WCC. Also need a consensus of how to go forward with this. Now is the time to address it.

 See list of volunteers for the Barriers Workgroup in the Industry Report section below. **OPEN**
4. *Invite 4 or 5 rig managers to next WCC to voice their concerns and determine how we can help.*
 No action yet to report. **OPEN**
5. *Formulate "Gas in Riser" Workgroup recommendations.*
 Nothing new to report from the workgroup. The topic has been included in the upcoming conference agenda. The workgroup is waiting on guidance from IADC or the WCC about how to move forward. Paul Sonnemann's intention was to work on the topic from the technical perspective, rather than to have a roundtable. At least three new systems are being produced right now, so we should be providing some guidance on what constitutes a good system. This topic was introduced two meetings ago, at which time the WCC could see that regulators were going to tell us what to do, and we want to be able to tell the regulators what would work best. We must get ahead of the game. Members support this endeavor. Most of our rigs are not equipped properly right now.
Action: Propose a draft paper on the topic and create the workgroup. Need to look at what the requirements are and what we need to do. Paul, Gene, and Dan (plus Paul/Brenda's list of people who want to participate) will meet informally after this WCC meeting. Brenda provided a signup sheet. Land drillers should be interested in this, too, because all drillers need to be able to detect a kick quickly.

 The following people signed up to join this workgroup: Martin Tindle, Rowan;

Andy Frazelle, BP;

Robert Ziegler, Petronas; Paul Sonnemann, Safekick; Johnny Richard, Rig QA; H. Gene Wilson, Aberdeen Drilling School; and David Martin, Ensco. [OPEN](#)

6. *Communicate interpretation of minimum simulation time to WellCAP providers. (Brenda Kelly)*

This topic ties to the curriculum because IADC and the Panel need input on how changing the simulator requirement will affect the rest of the course. The training providers (TP) need more guidance on this. If the course is more than the minimum, does simulation time need to be 30% of the whole time, or just of the time that is currently required? Answer: The 30% refers only to the required amount of time rather than the actual time if course is longer than required. TPs seem to want to increase the course time to allow for more simulation rather than try to fit 30% into existing course. The TPs want to know the focus of the simulator subcommittee. They have a number of questions, such as the following:

- Do they want to build more capability into the simulator, or use all of the current capability? (Both simulator manufacturers say there is more capability than we are using, but some instructors don't know how to use them.)
- Is there a plan/strategy recommended for accommodating simultaneous activities in the classroom (while some students are required to use the simulator?)

The TPs want direction, so they can move forward. Should we wait to see how the Panel's recommendations will affect simulation? The manufacturers do have some training on how to use the simulators but spend too much time showing how to program information into the simulator rather than how to use all the capability. As requirements change, all of this discussion may change. We can move forward now if we focus on current requirements. Currently, the TPs are not requiring the instructors to spend a certain amount of time on the simulator before they start teaching. They are just required to have a certain number of teaching hours. Rather than adding new capability to the simulators, they should focus on learning the full functionality of the existing systems. They should also do more "exception training," e.g., putting the gauge questions on the simulator. Later, we can have a discussion about what more we want the simulators to be able to do.

If we raise the simulator requirement to 30%, we will have to cut out something. There is not enough time for it now. They have trouble getting through the basics. That's why they instituted the simulator workshop, which is DIT-approved rather than WellCAP-approved (WCT). During course feedback, students say they need more simulation time, but there just isn't enough time in the course. Need to either add to the time requirement of the course, or require an additional course. If it's not REQUIRED, it will not happen. The trainers cannot do a decent job in the current 20-hr requirement. The DCs and Operators don't want to spend the money/time, but to do it right they may have to. The right time requirement depends on class size and instructor/student ratio. There is no way to really cover everything that is required in the WCT course within the minimum required amount of time. The commercial providers developed their 2 ½ day course based on Paul's recommendations.

The suggestions made in the past have not always been distributed. The Simulator Subcommittee needs input from the TPs that are using the simulators, so they can provide suggestions on how to achieve the best result. How long does it take to do a simulator exercise? It depends on the student and the type of exercise. We need to send out a survey to allow for documentation of simulator specifics. What parts of the curriculum can be done on the simulator? Can we put some of the PPT on the simulator? The students would prefer that. The TPs can pull out line items from the curriculum to see what could be done on the

simulator? Find out what the existing machines can do first. The Panel is discussing CEUs—like those done in other industries, and they are recommending a change to the WCT structure to offer this option. CEUs may even replace recertification. [OPEN](#)

7. *Make recommendations for simulator activities; submit to Simulator Subcommittee (Curriculum Subcommittee).*

Continued from #6

The Simulator Subcommittee should focus their efforts, choosing one activity on which to concentrate and complete the effort.

Action: Provide Benny with a charge from the WCC to take back to his subcommittee (Brenda to meet with him). The funding is what makes these ideas work. If training is not a requirement, then it is hard to accomplish. The WCC discussed “exception training,” real-world simulation. The curriculum developers will need more input from the field on what types of incidents they are seeing, so they can add to protocol training. The Simulator Subcommittee currently has five commercial trainers and a manufacturer, and they need end-users participating in order for their recommendations to be effective. The subcommittee can move forward on what they think is best and can present their suggestions to the WCC. The problem, they say, is that they can’t get the subcommittee members to agree.

Action: Subcommittee should write down all the areas on which they disagree and prepare a document on which the WCC can take action. Add the issue to the next agenda to obtain guidance from the WCC.

Action: Define how the instructors should be trained on using a simulator. We want to find a way to include unusual situations on the simulator, even if that means adding more training time. See model of the airline pilot training. Add a way to assess behavior and skill through the simulator. We will take this discussion offline.

Action: Benny – email subcommittee members notes from today’s discussions. If his members are not committed to addressing the issues, then maybe he needs new members.

Action: More WCC members need to participate in the Simulator Subcommittee. A sign up sheet was circulated. The following people signed up to participate on the Simulator Subcommittee: Andy Frazelle, BP (“I will get the right person from BP to help out and contribute!”); Robert Ziegler, Petronas; Alex Sas-Jaworsky, SAS Ind.; Paul Sonnemann, Safekick; Chuck Boyd, CS; John “Skip” Rollinson, Oxy; Ron Bohuslavicky, Boots & Coots; Ed Geissler, WCS; H. Gene Wilson, Aberdeen Drilling School. Neil York, Lamunyon Drilling. [OPEN](#)

8. *Select a Vice Chair (Steering Team).*

[OPEN](#) – The Chair has spoken with a few people who were nominated. We will have a co-chair by August. The co-chair must be a land contractor. This is a 2-yr commitment.

9. *Identify SMEs available to support WellCAP curricula redesign (All members).*

We will need more than one subcommittee to address changes. Send names of potential participants who could provide SME support in specific areas. We will know better what kind of support we need when we see the Panel’s recommendations.

Action: Develop a survey in which all WCC members list/document their top 3 subjects of expertise. (Brenda) This will allow IADC a way to quickly identify WCC members who can contribute to specific efforts. This needs to go out to all WCC members. Also, create a list of what kind of support we anticipate, so perhaps the email recipients will know the categories they can choose from for their expertise. If this information is shared with the whole WCC, then we would all know who to go to.

	<p>Action: Identify what 3rd-party resources we have available as SME. (Brenda/WCC Members)</p> <p>Action: Member Robert Ziegler will send Brenda a list of questions to ask on the survey.</p> <p>Action: Brenda/Holly to send out survey to all members and to 3rd parties. OPEN</p> <p>10. <i>Expand international involvement (Brenda Kelly/ WCC members).</i> The members who work for international companies will communicate with their counterparts in other countries. Need more suggestions on how to act on this. We should have a WCC meeting at every conference around the world. That would allow people around the world to participate. We could also contact people through the international chapters. They could get people to call in. We can use new technology to set up WCC meetings in other countries and then plug them all together. OPEN</p> <p>11. <i>Investigate interest in a roundtable or presentation on blind shears (Chris Donnelly).</i> Donnelly was not present. This topic came up in the Steering Committee. Member Covey Hall’s company submitted an abstract on this (pipe material strength, shear blade geometry), so they could put together a presentation on this for the WCC. API survey shows that not enough attention is paid to this topic. It needs to be more than just a roundtable presentation and should be added to the curriculum and to KSAs. Short term, we could focus on the USCG report on what happened at Macondo. As a committee, we should have a specific response to that report. That could be our first step. A committee working on this topic is already established: The IADC Deepwater Guideline Committee (DGC). People who are interested need to get involved with that committee by connecting with Fran Kennedy. Note: “Deepwater” refers to any subsea operation. Some of these practices need to be brought up with the land people, too, and that won’t happen at the DGC. The Surface Stack issue apparently doesn’t have a guideline. This does merit some additional study because there appears to be a gap. The API is currently attempting to address this issue, so Sas-Jaworsky will report back on that. Action: Report on API effort to address blind shears, shearability of pipe (Sas-Jaworsky) OPEN</p>
9:30 – 9:45	Break
9:45 – 10:00	Update on Barriers Workgroup Activities Scott Randall, PlusAlpha Risk See notes in the Industry Groups Update section below.
10:00 – 10:10	Other Committee Updates Maintenance Committee (Dan Munoz) Dan reported on WCC activities to the Maintenance Committee and invited joint efforts between the two committees.
10:10 – 10:45	Industry Groups Update Note: Feel free to contact the people listed as Chair of each of these workgroups to ask questions and provide input. <ul style="list-style-type: none"> • API RP16 (RP16A, 16C, 16D, & 16AR): Alex Sas-Jaworsky (SAS Industries) <ul style="list-style-type: none"> ➢ See Sas-Jaworsky’s PPT, which details specs for BOPs, choke and kill lines, RAMs, coiled tubing, snubbing, diverter systems, etc. Equipment will have to be recertified every 5 years? Action: He will send PPT to IADC for posting with Minutes. ➢ API is writing a practice on snubbing and diverters. Some of these documents have already been published, but are now going through a revision or new edition.

- Definition of “specification.” All well control equipment will have to have very detailed written specifications.
- What is well control-capable equipment?
- All of this information needs to be incorporated into our curriculum, and we need to identify who needs to know this information and incorporate more onshore people.
- If all equipment can't be traced back to the poured steel, it may not pass certification.
- This involves adding to required coiled tubing training.
- How to build a diverter? RP64 to be developed into a Standard.
- These are now our responsibility. The documents/requirements will be incorporated into SEMS.
- Reference all of these in our Panel recommendations and ensure that we have all of this in our training.
- Members discussed the timeframe for being in conformance. The regulators provide a publish date and an effective date, which is usually 6 to 9 months after the publication date. There is not much time to become compliant. They expect us to be paying attention throughout the process.
- Wireline will be on the books for 2015, after snubbing is finished.
- Document 16AR will be looking at inspection techniques.
- Saudi Aramco currently takes their equipment back to drawing, replaces all the parts/seals, etc. when repairing it. If their equipment gets beyond the API certification tolerance, they will dispose of it. Have to evaluate service life of the equipment, too. The document will provide the guidelines for recertifying. Monogram and serial preservation will be provided.
- Our new requirements are starting to resemble those of the nuclear industry.
- API Standard 53: Gary Nance (Chevron)—Accumulator and closing systems.
- API RP59: Bill Rau (Chevron), Andy Frazelle (BP)
- API RP64: Alex Sas-Jaworsky – see above
- API RP75: Scott Randall
- API RP96: Scott Randall, Bill Rau, & Julia Swindle
 - RP96 has been published, and in Randall's opinion, industry is not ready for this new Standard. Randall's PPT provided information on the new Standard. There is an opportunity for our leadership now because of confusion among the various groups. Randall spoke with SEMS people, and they are not happy with the response from the operators concerning the audits. Now, having the policy is not enough. Just knowing how to do the process is not enough to preventing an incident. How do the barriers fit into this? Regulators are looking at how to move beyond the process and look at the barriers themselves. It is incumbent upon us at IADC to take the leadership role. We can use our Barriers Workgroup to provide information on what this Standard means to us and to provide guidance in industry's responding to its requirements.
 - The workgroup needs to define barriers, consider more than mechanical barriers (e.g., operational barriers), and consider specific barriers (e.g., rather than the whole stack/BOP, consider the individual components). This all relates to the SEMS 13 elements. How to communicate the barriers? How to test them? Need to make more progress on the workgroup: We need more people, a charter, deliverable, methodology.
 - This workgroup will meet every 3 weeks; a lot of work will be done offline.
 - During the meeting, the following people signed up to join this effort: Scott Randall, Lead; Alex Sas-Jaworsky, SAS Industries; Robert Ziegler, Petronas; Cheryl Francis, Statoil; H. Gene Wilson, Aberdeen Drilling School; Neil York, Lamunyon Drilling.
 - COS has set up a committee to define critical roles in terms of barriers. This will also tie into the KSA project because we have to know who is responsible

	<p>for barriers on a rig. Randall recommends a RACI chart around the barriers in RP96.</p> <ul style="list-style-type: none"> ➤ RP96 affects the rig hands because they work with the specific equipment that are barriers and will have to know this for certification. It also affects the design phase. The COS is defining competencies; then companies will have to assure that their employees are competent. End result will be competence assessments for rig hands regarding barriers. Regulators are already considering a precursor to the U. S. Code of Federal Register. We need to incorporate references to these API documents in our curriculum and requirements? BSEE turned all “shoulds” into “shalls,” but some of them counteract each other. We must become intimately familiar with RP96 because it affects us directly. Must inspect even new equipment (e.g., huge anomalies (cracks) have been found even in new BOPs). ➤ We will need to change our training to reflect all of this. • API RP97: Andy Frazelle & Bill Rau No report. Bring back at next meeting. Add to action item. • BSEE information on 14-day BSR function testing & casing point pressure testing. (Bill Rau) Bill was not present. • BSEE SEMS update: (WCC member to report: TBD) • RECOMMENDATION: Whenever a new API Standard is published, a WellCAP curriculum review should automatically be initiated by the WCC.
<p>10:45 – 11:00</p>	<p>IADC & WellCAP News</p> <ul style="list-style-type: none"> • KSA project status (Brooke Comeaux): <ul style="list-style-type: none"> ➤ Workgroups are meeting. There are currently nine groups. The Marine, Technical Maintenance, and Offshore Operations groups need more SME support. Progress on the database. Current information will stay active so members can refer back to them. ➤ Petrofac is ready to start with the Regulatory group. Facility Management or any other group can use more support. ➤ Action: Contact Brooke if you have anyone who can help with these groups. • <i>Deepwater Well Control Guidelines</i> update and <i>Drilling Manual</i> update (Fran Kennedy-Ellis): <ul style="list-style-type: none"> ➤ See Fran’s PPT. Both documents are being updated and will allow for e-books, color photos, and ISBN. The updates will be a totally new revision/edition with new equipment/content. They will have a wiki to generate discussions on the topics. They may be provided in multiple languages. The timeline for publication is Q1 2015. We may release individual sections in e-book format as they are completed in order to get early feedback. ➤ We need contractors to be more involved. Contact Fran if you can help. Specific needs include a lead for the chapter on well control equipment. See “Gaps” section of the PPT to identify other specific needs. • WellCAP Curriculum Revisions: A comment period will be provided for Drilling Fundamental Curriculum revisions and Underbalanced Operations/Managed Pressure Drilling. • 2013 Well Control Conference of the Americas – See conference schedule on the IADC website.
<p>11:00 – 11:30</p>	<p>Open Discussion/Next Meeting Topics</p> <p>Discussion topics:</p> <ul style="list-style-type: none"> • Subsea well control needs more focus. Need a subsea-only and surface-only course rather than combining. The subsea students need more instruction than what they are currently getting. The WCC needs to make recommendations to the Curriculum Committee about this. However, they can’t write a curriculum for a

certification that we don't even offer (subsea-only). Can we address this issue in the Panel's recommendation? The TPs say that their attempts to be in compliance take away from time doing what is really important. Commercial providers will support a subsea curriculum.

Action: Add "subsea-only" course to Panel's WellCAP recommendations.

- What topics and/or speakers do the WCC members want to see at the next WCC meeting?
 - Focus on international challenges since we will have people there who are attending the conference.

Action: Brenda will monitor conference registration to see who is attending and could be invited. Specifically, invite some people from Brazil, Norway, and Canada.

- Working with international regulators.
- Invite international speaker, even if communications via electronic means.
- Challenges of a national drilling company (Abu Dhabi) to meet with us (e.g., personnel challenges).
- Focus on events (e.g., Indonesia, Iraq)
- Discuss recommendations of the Panel.
- Discuss how we could use technology to facilitate international meetings, and try to set it up for meeting.
- Discuss the change in philosophy of governments incorporating API Standards rather than writing their own. Note: If we will do the work, they will generally accept it. Therefore, we need to develop the Standards in advance. What is out there that affects us and that we can get in front of? Be proactive.
- Can we get a North Dakotan and Eagle Ford Bakin operator to discuss well control challenges? What kind of events do they have? Consider incorporating the well control issues planned for the Shale presentation.
- Regulators say they cannot participate. Why? Concern that something is going on with them.
- Does anyone have a contact at the Texas Railroad Commission? They have something like SEMS onshore coming out.
- Do other WCC members want to meet with subcommittees or focus groups at 7 a.m.?
- **Patty: Capture all the names from signup sheets in the minutes.**
- **Arrange electronic communications for future WCC meetings. (Brenda)**

11:30

ADJOURNMENT

Action Items from WCC

Responsible Party	Timeline (on or before)	Action Item
WCI staff		As soon as the new WCI Project Manager hires someone with communications responsibilities, start providing the Training Providers with timeline information regarding the new Standard and the phases of implementation.
B. Kelly		Communicate interpretation of minimum simulation time to WellCAP providers.
B. Kelly		Provide Benny with a charge from the WCC to take back to his subcommittee. Circulate a sign-up sheet for new Simulator Subcommittee members.
B. Kelly		Monitor conference registration to see who is attending and could be invited to the next WCC meeting. Specifically, invite some people from Brazil, Norway, and Canada.
B. Kelly		Pass around a sign-up sheet for a barrier-management workgroup
B. Kelly/Steering Team		Encourage international participation on the Steering Committee and on the WCC.
B. Kelly / Holly Shock / Patty Tydings		Develop survey for all WCC members and 3 rd parties to identify their subjects of expertise. Send survey to all 500 members and 3rd-party resources we have available. (See item below.)
P. Tydings		Capture all the names from the sign-up sheets in the minutes.
B. Mason/Simulator Subcommittee		Write down all the areas on which the subcommittee members disagree and prepare a document on which the WCC can take action. Put this issue on the next agenda to provide direction to the subcommittee.
B. Mason + Simulator Subcommittee		Send out a survey on the use of simulators: How long does it take to do a simulator exercise? (Depends on the student and the type of exercise.) What parts of the curriculum can be done on the simulator? Can we put some of the PPT on the simulator? The students would prefer that. Pull out line items from the curriculum to see what could be done on the simulator? Find out what the existing machines can do now first.
B. Mason + Simulator Subcommittee		Propose recommendations on training requirements for instructors using simulators. The instructors need to be trained on the full functionality of the simulators.
Training Providers <i>et al.</i>		Provide input to the Simulator Subcommittee, so they can make suggestions on how to achieve the best result.
Curriculum Subcommittee		Make recommendations for simulator activities; submit to Simulator Subcommittee.

Curriculum Subcommittee; B. Comeaux		Add blind shears to the curriculum and to KSAs. Focus on the USCG report on what happened at Macondo.
Covey Hall		Prepare presentation for WCC on blind shears. (See item above.)
P.Sonnemann + workgroup		Draft paper on the "gas-in-riser" topic. Need to look at what are the requirements and what do we need to do? Paul, Gene, and Dan (plus Paul/Brenda's list of people who want to participate) will meet informally after this WCC meeting.
P. Sonnemann		Report back to IADC about any volunteers for the Deepwater Guideline Committee.
Sas-Jaworsky		Report on what the API is doing regarding blind shears.
Sas-Jaworsky		Provide IADC (Kelly) with PPT on API 16.
Andy Frazelle, Bill Rau		Provide WCC with information on API RP97.
Bill Rau		Provide WCC with BSEE information on 14-day BSR function testing & casing point pressure testing.
Robert Ziegler		Send Brenda a list of questions to ask on the survey.
All		Contact Fran Kennedy-Ellis if you want to help with the Drilling Manual or Deepwater Well Control Guidelines
??		Invite 4 or 5 rig managers to speak at a WCC meeting.
??		Add to Panel's recommendations that the commercial providers support a subsea curriculum.
TBD		Prepare a specific response to USCG report on Macondo.

Attendance:

Name		Company Name
H. Gene	Wilson	Aberdeen Drilling School, Ltd
Ron	Bohuslavicky	Boots & Coots Services
Andy	Frazelle	BP America
Ambar	Acevedo	Chevron
Gary	Landrum	Consolidated Pressure Control, LLC
Chuck	Boyd	CS Inc
AJ	Guiteau	Diamond Offshore
David	Martin	Ensco plc
Kelly	Williamson	GuideVue
Dave	Moyer	Helmerich & Payne

Shane	Mendel	Hercules Offshore
Brenda	Kelly	IADC
Elfriede	Neidert	IADC
Brooke	Comeaux	IADC
Mark	Denkowski	IADC
Patty	Tydings	IADC
Bob	Warren	IADC
Leon	Robinson	International Drilling Consultants
Neil	York	Lamunyon Drilling
Covey	Hall	LR - Drilling
John	Bottrell	Nomac Drilling Corporation
John	Rollinson	Occidental Oil & Gas
Robert	Ziegler	Petronas Carigali SDN BHD
Scott	Randall	Plus Alpha Risk Management Solutions
Benny	Mason	Rig QA
Johnny	Richard	Rig QA
Martin	Tindle	Rowan Companies
Alexander	Sas-Jaworsky	SAS Industries Inc
Monty	Gilleland	Saudi Aramco
Kathleen	Francis	Statoil
Dan	Munoz	Transocean
Barry	Cooper	Well Control School
Ed	Geissler	Well Control School