17th Annual Gulf of Mexico Deepwater Technical Symposium continues to focus on Gulf of Mexico case studies and key technologies in the following sessions:

- Drilling Technology
- Completions & Interventions
- Production Systems
- Reservoir & Economics
- HS&E & Regulatory
- Pipeline & Infrastructure
- Emerging Technology
- Geoscience
- Student Presentations

NEW CHALLENGES OPPORTUNITIES

August 21st & 22nd 2013

The Hilton New Orleans Riverside Hotel

www.deepwaternola.org

PROUDLY HOSTED BY
**SESSION SCHEDULE**

**Geoscience**

**Anthony Rodriguez (Repsol), Matt Hoffman (Chevron), Richard Mongan (Chevron)**

The 2013 Geoscience Session includes presentations covering a wide variety of components related to the deepwater value chain. From a regional level, there will be a presentation on the Lower Tertiary Wilcox play’s reservoir property trends as well as on hydrodynamic fractionation of minerals in submarine fans based on physical lab experiments. At the prospect level, we will take an in-depth look at Chevron’s phased deepwater development of the world-class Tahiti field. As we move into the reservoir level, we include new methods to improve seismic imaging adjacent to salt and about various logging technologies to improve interpretations of formation evaluation, triaxial induction, LWD sonic data, and to evaluate laminated reservoirs.

**HS&E / Regulatory**

**Carl Flores (Shell), Joe Ebert (Chevron)**

As offshore exploration and development activities recapture momentum, Operators and Drilling Contractors are compelled to incorporate lessons learned from past incidents. The HS&E & Regulatory Session will have two papers that focus on learning from past incidents. 1) ERM Americas will present on the learnings from the Macondo Incident in regards to MODU new build designs. The author will speak to effective controls in the risk hierarchy—Eliminate, Substitute, Isolate, and Engineer; mechanisms related to process safety design. 2) Fisher IT, Inc. will discuss the role human performance plays in fatality and serious injury reduction, as well as improving quality and production. Human performance is often discussed in incident investigations, but often the recommendations do not adequately address human performance. The second half of the HES Session will focus on new HES technologies being introduced. 3) RCS Tank Cleaning will discuss automated tank cleaning systems which significantly reduce risk to workers and the overall man-hours required to complete jobs. Finally, 4) Paradigm Safety Integration, LLC will describe the near term potential for Human SCADA technology, a new class of PPE, and how its use supports a fundamental shift in how large organizations think about workplace safety.

**Production Systems**

**Casey Blake (Shell), Allen Wiley (Halliburton)**

Gulf of Mexico deepwater discoveries bring new challenges in the area of realizing value through producing assets. Continuous improvement in all areas are required as we approach new horizons in the deepwater areas of the Gulf of Mexico. Beginning with the reservoir characterizations, a production system is built with the reservoir characterizations, a production system is built around the hydrocarbon resources in place. Deepwater production with the reservoir characterizations, a production system is built around the hydrocarbon resources in place. Deepwater production systems are being built to capture, process, and store the hydrocarbons. Applying the optimum technologies to maximize hydrocarbon recovery while also ensuring reliable and safe operations is a key goal for operators today.

The purpose of the Production Systems session is to highlight newly developed practices and designs and present applications of technology. Many of the new developments are adopted worldwide following successful implementation in the Gulf of Mexico.
Student Papers
Emmott Lockard (ENI Petroleum), Elizabeth Mann (Shell), Ashley Breaux (Chevron)

The Deepwater Technical Symposium is committed to providing students opportunities to enhance their university education experience by providing them an excellent opportunity to learn more about how science and technology are applied to the problems encountered in the deepwater oil and gas industry.

The Symposium also gives students a venue to present their research over the two days of the symposium in oral and poster sessions, a program for their career interests and networking with oil industry professionals.

Drilling Technology
Gary Roebke (Chevron), Sean O’Boyle (Expert E&P), Rick Farmer (Century Exploration)

The 2013 Drilling Technology Session is focused on technologies used to meet the challenges of drilling in the deepwater GOM. Technologies to be discussed include: 1) the use of swellable elastomers in the cementing process; 2) bit-reamer selection and procedures to enhance hole enlargement; 3) ultra deep gas HPH Technology development; 4) technology application and optimization in riser-less wells; 5) foam cementing; 6) new drilling fluids; 7) industry containment technology; and 8) External inflatable packers for BOP testing.

Reservoir & Economics
Luiz Amado (ENI Petroleum), Paul Morphy (Shell)

The 2013 Reservoir Engineering Session will include presentations about best practices, challenges, monitoring performance and enhance confidence of deepwater reservoirs and projects. Gulf of Mexico deepwater reservoirs are very challenging in terms of fluids, drilling, connectivity and productivity.

This session will present some examples and what solutions can be applied today to address and improve our understanding of such complexities.

Completions & Interventions
William Franke (Hess), Henrik Larsen (Schlumberger), Alan Holley (Halliburton)

Completions and Interventions are continuing to receive significant focus from Deepwater Operators. Designing completions around well life cycle and reducing interventions have become paramount for enhancing economics and improving overall recovery. Another recent trend includes introducing new technologies and completion methods to limit future workovers. This provides a substantial benefit to the project, particularly subsea wells with multiple productive intervals, but generally increases the level of complexity as well as risk to the initial completion installation. The completions and interventions session will explore some of these new technologies to improve completion reliability and increase recovery as well as review enhanced technologies for some of the currently used methods in deepwater completions & interventions. Our session will also focus specifically on options for delivering multi-zone completions in deepwater wells. These designs are becoming a necessity to justify economics on many projects planning ultra-deep subsea wells.

Emerging Technology
Angie Gobert (BSEE), Art Johnson (Hydrate Energy)

The technological limits of the oil and gas industry in deepwater Gulf of Mexico are not only being tested by operational challenges of the extreme water depths, but also those from hostile geologic environments, deep wells with extreme pressures, loop currents, and tropical storms and hurricanes.

The emerging technologies session will feature presenters with knowledge and experience in a variety of areas. Their presentations will explore creative solutions and illustrate new methods to overcome some of the technological hurdles that will help lead the industry to a renewal in our enthusiasm and commitment to our responsibility and research as we continue to encounter new challenges and opportunities with deepwater Gulf of Mexico.

Pipeline & Infrastructure
Angie Gobert (BSEE), Allen Wiley (Halliburton)

As the oil and gas industry in the Gulf of Mexico progresses into extreme water depths, one challenge is how to design and safely operate the pipelines that carry hydrocarbons from subsea wells to processing facilities. To meet the critical and complex issues presented by this challenge, the industry has made significant advances in pushing pipeline technology past previous limits. Much work has been done on researching and designing specialized equipment including steel catenary and hybrid risers, jumpers, PLET’s and sleds, umbilicals, and other associated pipeline components.

The 2013 pipeline session will feature 2 presenters with extensive knowledge and experience in the design, fabrication, and installation of deepwater pipelines. Their presentations will provide valuable insight into the general aspects of third party design, fabrication, and installation riser verification associated with various floating structures. Additionally, creative pipeline infrastructure solutions developed to address challenges encountered will be shared from the perspectives of both, the lease operator/producer and the transporter.

Concluding Plenary Session
Joe Leimkuhler (LLOG) - Moderator

The Management Panel has traditionally closed out the Deepwater Symposium and this year's 17th Annual Gulf of Mexico Deepwater Technical Symposium will be no different. This year's management panel discussion entitled will cover what technologies are required to further advance Deepwater development. We will start off the session with a presentation by Curtis Wilie, the Shell E&P, Technology Delivery Manager for Deepwater Well delivery. Curtis will provide a Deepwater Operator's view of where Shell is focused on new technology. Next will follow presentations from Robert Holicek with Schlumberger (N. America Offshore Projects Manager), Dave Savelle with Halliburton and Rustom Mody, VP-Technology with Baker-Hughes. These presentations will focus on key technologies for Deepwater in Drilling, Completions and Well Planning. To wrap up the panel, Bradley Beitler FMC VP-Technology will provide a “What's Ahead” overview of subsea production systems. The goal is for the panel to provide a new technology overview of Deepwater well operations from thought to finish, or in the case of the well life cycle, from idea to production.
## 17th Annual Gulf of Mexico Deepwater Technical Symposium

**WEDNESDAY, AUGUST 21**

AADE will hold the Fin Feather Fur on Tuesday, August 20th, from 5-8 pm at Generations Hall, Warehouse District, New Orleans

### 7:00 to 8:00 — Continental Breakfast

<table>
<thead>
<tr>
<th>GEOSCIENCE</th>
<th>HS&amp;E</th>
<th>PRODUCTION SYSTEMS</th>
<th>STUDENTS</th>
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<tbody>
<tr>
<td>Formation Evaluation in Unknown Water Salinity Using Multi Depth of Investigation Sigma While Drilling (Schlumberger)</td>
<td>An Introduction to Human Performance, Discussing the Role Human Performance Plays in Fatality and Serious Injury (Fisher IT)</td>
<td>Anti-Agglomerant with Methanol Supplementation for Hydrate Management at High Water Cut (Halliburton)</td>
<td>Evaluation of Miscibility for Future Offshore Gas Injection Projects (LSU)</td>
</tr>
<tr>
<td>Evaluation of Laminated Reservoirs (Halliburton)</td>
<td>Confined Space Entry/Eliminating Risk Utilizing Hierarchy of Controls (RCS Tank Cleaning)</td>
<td>Implementation of ESP Gas Handling Technology Optimizes Drainage of Hydrocarbon Reservoirs in GOM (Baker Hughes)</td>
<td>An Evolutionary Model of a Retrograding Subdeltaic Distributary of a River Dominated System (UNO)</td>
</tr>
<tr>
<td>Advances In Triaxial Induction Interpretation (Schlumberger)</td>
<td>Implementing Human SCADA in the Work Environment (Paradigm Safety Int.)</td>
<td>Flow Assurance Feasibility of Acid Stimulation from Producing Facilities (Assured Flow Solutions)</td>
<td>Experimental Assessment of Casing Expansion as a Solution to Microannular Gas Migration (LSU)</td>
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### 11:00 - 1:30 Lunch & Keynote Speaker: Charlie Williams, Center for Offshore Safety

<table>
<thead>
<tr>
<th>DRILLING</th>
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<tr>
<td>Use of Swellable Elastomers to Enhance Cementation in DW Applications (TAM, Inc.)</td>
<td>Best Practices in Evaluating WFT Fluid Samples and The Blueprint for a Deepwater Fluids Program (Core Lab)</td>
<td>Comparing Horizontal and Vertical Technology and Effects of Platform Movement (Envirot Tech Systems)</td>
<td>Experimental Study of the Effects of Shear Stress and Drilling Fluid Contamination on the Integrity of the Cement-Formation Interface (LSU)</td>
</tr>
<tr>
<td>Optimal Bit Reamer Selection and Operating Procedures Improve Hole Enlargment (Baker Hughes)</td>
<td>Oil Water Contact Based on Fluid Properties Measurements for Reserves Calculation (Schlumberger)</td>
<td>Lessons Learned in Asphaltenic Mitigation/Remediation (Assured Flow Solutions)</td>
<td>Quantitative Risk Assessment of a Deepwater Drilling Oil Spill Scenario (LSU)</td>
</tr>
<tr>
<td>Managing the Hostilities of the Ultra Deep Gas HTHP Frontier (Baker Hughes)</td>
<td>Enhancing Confidence in Dealing with the Challenges of Deepwater Projects (McDermott)</td>
<td>A Fundamental Approach to Selection of Internal Corrosion Mitigation Measures in a GOM, Wet Gas Gathering and Liquid Transmission Pipeline System (RCP)</td>
<td>Removal of Zinc Ions from Oil and Gas Wellbore Returned Fluids (LSU)</td>
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### 2:00 - 3:00

#### 3:00 - 3:15 — Break

<table>
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<tr>
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<tr>
<td>New Organophilic Clay-Based Flat Drilling Fluid Demonstrates Ability to Drill High Angle Deep Water Wells with Decr. Gel Strengths and SWR (M-I SWACO)</td>
<td>In-situ Stress Measurement Using Wireline Formation Tester with Examples from North America (Schlumberger)</td>
<td>Different Configurations of Intelligent Well Completions with Three Stacked Frac Packs (LOG)</td>
<td>Panel Discussion: How to Prepare for the Fall Recruiting Season - Part 2 (Industry Panel)</td>
</tr>
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### 4:45 - 6:30 — Reception Exhibition Hall

**4th Annual SPE-Delta Young Professional Gala and Silent Auction to benefit Core Element Hilton Riverside**
7:00 to 8:00 — Continental Breakfast

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<tr>
<th>GEOSCIENCE</th>
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<tr>
<td>8:30</td>
<td>Reliable LWD Sonic Data in Shallow Hazard Zones (Schlumberger)</td>
<td>RCX Sentinel Focused Sampling Service and FASTtrak LWD Fluid Analysis (Baker Hughes)</td>
<td>Integrating Virtual Simulation in the Development of an Expandable Liner Hanger for Wellbore Completion (Baker Hughes)</td>
</tr>
<tr>
<td>9:30</td>
<td>Success and Challenges in a Phased Deepwater Development, Tahiti Field, Gulf of Mexico (Chevron)</td>
<td>Automated Alarms for Smart Flowback Monitoring and Early Kick Detection (Baker Hughes)</td>
<td>Drill Pipe Riser Intervention System Successful Experience in Offshore West Africa (VAM Drilling)</td>
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10:30 - 10:45 — Break

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<tr>
<th>DRILLING</th>
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<tr>
<td>10:45</td>
<td>Evolution of Industry's Containment Capabilities and Technology (MWCC)</td>
<td>Tubular Bells Export Pipeline Project (Williams)</td>
<td>Analytical Software Aids in Wellbore Cleanup Operations, Reducing Risk and Cost of Future Operations: A Case Study (Baker Hughes)</td>
</tr>
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11:45 - 1:30 Lunch & Keynote Speaker: Joe Leimkuhler, LLOG Exploration Co.

1:30 to 3:45 — PLENARY SESSION

Deepwater Technology — New Challenges, New Opportunities

- Curtis Wilie (Shell E&P) • Technology Delivery Manager - Deepwater Well Delivery
- Dave Savelle (Halliburton) • Director of Drilling - Completions and Realtime
- Robert Holicek (Schlumberger) • North America Offshore Projects Manager
- Rustom Mody (Baker Hughes) • Vice President - Technology
- Bradley Beittel (FMC) • Vice President - Technology

3:45 — Closing Remarks: Matt Wandstrat, Symposium Co-Chair

WEDNESDAY, AUGUST 21

DAY 1 • STUDENT POSTER SESSIONS

<table>
<thead>
<tr>
<th>9:00 to 3:00</th>
<th>Computational Fluid Dynamics Simulations of Fluid Structure Interactions in Offshore Structures (Yasin Demiralp - LSU)</th>
<th>Minimizing Environmental Impacts in GoM Using Oil Spill Response System Supply Chain Model with Oil Drill Models (M. Mohandessee - LSU)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Econometric Analysis of Business Supply Chain in GoM Region for Different Oil Spill Scenarios (Negar Dahitaleghani - LSU)</td>
<td>NABORS M400 - Chevron's Big Foot Emerging Deepwater Technology (Craig Lucia - UNO)</td>
</tr>
</tbody>
</table>
Symposium Registration
Register Online Today
www.deepwaterrnola.org

REGISTRATION FEE INCLUDES:
• Access to Technical Sessions, Management Plenary Session and Student Poster Sessions
• Invitation to Keynote Speaker Sessions
• Lunch on August 21st and 22nd
• Entry to Exhibit Halls

REGISTRATION FEES
• SPE•AADE•NOGS Members Non-Members
  DWS Registration + Gala USD $300 USD $350
  DWS Registration Only USD $250 USD $300
  Gala Tickets (if purchased individually) USD $60
  STUDENT Registration FREE

REGISTRATION OPEN
DAY 1: 6:30 am to 6:30 pm
DAY 2: 7:00 am to 11:45 am

EXHIBITION HALL OPEN
DAY 1: 6:30 am to 6:30 pm
DAY 2: 7:00 am to 11:45 am

Why Exhibit in 2013?
As a company interested in the latest challenges in the Gulf of Mexico, you can’t afford to miss this event. Exhibiting will provide opportunities to make instrumental connections that hold the key to your success in this growing market.

Sign up to exhibit next year.
For details about sponsorships and exhibits, contact:
Jill Schlechtweg
jill.schlechtweg@shell.com
504-425-3183
Lloyd Springmann
lloyd.springmann@bakerhughes.com
985-590-6461

ACCOMMODATIONS
Hilton Riverside Hotel New Orleans
2 Poydras Street
New Orleans, LA 70140
504•561•0500

MasterCard, VISA, and American Express accepted. Attendance at the Deepwater Symposium will be limited. Please register early.
Cancellations: 100% refund granted for requests received before August 3, 2013. No refunds after August 3rd.
For additional information, please contact Symposium Co-Chair, Matt Wandstrat, 985-801-4300, MattW@llog.com
17th Annual Gulf of Mexico
Deepwater Technical Symposium

Special rate accommodations available at the Hilton Riverside Hotel in downtown New Orleans

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August 21st and 22nd 2013