15th Annual Gulf of Mexico

Deepwater Technical Symposium

August 11th and 12th, 2011
at the Hilton New Orleans
Riverside Hotel
New Orleans

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

- Drilling
- Well Completions
- Production Systems
- Reservoir / Economics
- HS&E / Regulatory
- Pipelines
- Emerging Technologies
- Geoscience

GOLD SPONSORS

The Deepwater Technical Symposium is proudly hosted by:
The closing event for this year's symposium will be a panel discussion discussing BOEMRE challenges going forward as the agency splits. Achee (Chevron) will cover well design & blowout response issues. Q&A Session with audience Joe Leimkuhler (Shell)

Incident Response Issues/Learnings
Captain Peter Gautier (USCG)
Chief Executive Officer
Marty Massey (MWCC)
Managing Director of the Helix Well Containment Group
David Coatney (MWCC)
Offshore Well Delivery Manager
Joe Leimkuhler (Shell)
Tim Achee (Chevron)

Plenary Session

Concluding Plenary Session

"The closing event for this year's symposium will be a panel discussion among industry leaders covering well activity and incident response in a post Macondo world. Initial presentations/discussion will cover well design and blowout (worst case discharge) response issues for deepwater subsea wells as well as deepwater platform wells. Tim Achee (Chevron) will cover well design & blowout response issues specific to Subsea BOP Stack wells, while Joe Leimkuhler (Shell) will cover similar well design & blowout response issues specific to Deepwater Floating platforms using a surface BOP stacks. Marty Massey from the Marine Well Containment Company and David Coatney from the Helix Well Containment Group will cover the issues related to Cap & Contain from the wellhead up. Our final panelists, are from the US Coast Guard. Capt Peter Gautier, will cover the high level incident response learnings from a Macondo type incident from a unified command perspective. The goal of the panel is to provide a comprehensive overview from well design to cap and contain to spill response for Deepwater well operations in a post Macondo world and allow the Q&A session with the symposium attendees to fill in any gaps. Don’t miss the final session it promises to be one of the highlights of the symposium."

Tim Achee (Chevron)
Intervention Engineering Advisor, DW E&P
Joe Leimkuhler (Shell)
Offshore Well Delivery Manager
David Coatney (MWCC)
Managing Director of the Helix Well Containment Group
Marty Massey (MWCC)
Chief Executive Officer
Captain Peter Gautier (USCG)
Incident Response Issues/Learnings
Q&A Session with audience Joe Leimkuhler (Shell)

SESSION SCHEDULE

Emerging Technology
Angie Gobert (BOEMRE), Ashley W. Breaux (Chevron)
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, 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 safer, smarter and stronger 2012 deepwater Gulf of Mexico and meet the challenge of new regulatory requirements.

HSE & Regulatory
Gary Roebke (Chevron), Steve St Amand (Century Exploration N.O.), Joseph Leimkuhler (Shell)
Post Macondo the importance of Good HSE Systems and performance has never been more prominent. The HSE session includes papers from Shell on learnings and challenges associated with making the HSE or Safety Case relevant to the crews at the rig site. Chevron will present an overview of proactive tools to improve HSE performance. Baker will present technology to clean tanks with no human entry exposure and Shell will present a review of area classifications and exposures associated with the use of temporary equipment.

Production Systems
Allen Wiley (Multi-Chem), Casey Blake (Shell)
Deepwater production facilities are currently at peak capacity supplying oil and gas to the market and providing a buffer to supply interruptions. As we resume deepwater drilling we will move forward into a future where our government’s plan to cut dependence on foreign oil will further challenge industry professionals to provide production systems designed to enhance production at maximum capacity. Oil and Gas recovery technology in deepwater Gulf of Mexico needs to be designed for the future to achieve high rate production throughput. As these systems become more complex and fluid handling more diverse flow assurance is necessary to delay interruptions or associated downtime. Equipment design both for surface fluid handling and sub-surface fluid separation will demonstrate the technology necessary to carry us into a future where supply and demand may reach never before seen levels.

Drilling Technology
Ken Dupal (Shell), Ronnie Faul (Halliburton), Rick Farmer (Crescent Drilling and Production), Sean O’Boyle (Expert E&P Consultants)
Drilling has always comprised a large portion of Deepwater exploratory and development project capital. The risk of an uncontrolled flow to the seabed is now also recognized as a significant factor for many deepwater projects. The past year has resulted in a number of additional regulatory requirements and industry standards to ensure adequate systems are in place to minimize risk. This has presented a number of new challenges for well designs over the well life cycle. In order to achieve an appropriate level of well integrity, there has been an increased focus on well design criteria, HSSE management systems and operating procedures. Additional effort has also been made in contingency planning for blowout response and relief well planning. To help address these challenges, the Drilling Technology session will include various topics, including: well design for casing loads due to blowout scenarios for subsea wells, DW platform rig design challenges for deepwater, deep wells from producing platforms, operational challenges from remote DW producing structures, BHA design and hole enlargement devices and fluid management for deepwater wells.
Reservoir Engineering & Economics
Paul Morphy (Shell), Didier Terroir (ENI Petroleum)
This session focuses on the challenges of developing, managing, and optimizing hydrocarbon recovery in the Deepwater GOM in the new regulatory environment. Included are: (a) an evaluation of trapped oil as a precursor to determining improved oil recovery concepts for 450 mature reservoirs in the Deepwater GOM, (b) a university bidding model that aids in estimating the winning price of an offshore lease, (c) field-measured compaction in a sand so unconsolidated lab measurements were not possible, (d, e) two presentations on estimating the Worst Case Discharge and (f) reservoir uncertainty assessment.

Geoscience
Bob Melz (Chevron), Richard Morgan (Chevron), Matt Wandstrat (Baker Hughes)
The Geoscience community continues to be an integral component of the Deepwater value chain and a strong proponent of implementing the innovations necessary to pursue continued development of Deepwater. This year’s Geoscience session includes a talk from Chevron on understanding salt welds in characterizing exploration plays, multiple presentations by Hess on structural and stratigraphic challenges associated with the development of the Pony field in the prolific Miocene trend of southeast Green Canyon and a discussion on advanced water flood surveillance techniques by Shell on the giant Mars field.

Pipelines
Angie Gobert (MMS), Allen Wiley (Multi-Chem), William Franke (Expert E&P)
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 the 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 the researching and designing specialized equipment including steel catenary and hybrid risers, jumpers, PLET’s and sleds, umbilicals and associated components. The pipeline session, the first one

THURSDAY, AUGUST 11
7:00 to 8:00 AM – Continental Breakfast (Exhibition Hall)

EMERGING TECHNOLOGY | HS&E | PRODUCTION SYSTEMS | STUDENT SESSIONS
--- | --- | --- | ---
9:00 | High Pressure High Temperature Sour Gas Solutions: Now and in the Future, Well Construction, Completion and Production (Baker Hughes) | Proactive HSE Engagement Tools (Chevron) | Novel Application of an Anti-Aggloeromate with Methanol for a 40 Mile Uninsulated Gas Tieback at a 100% Water Cut (Multi-Chem) | Historic Preservation Regulations, Geophysics, Industry and Shipwrecks in Gulf of Mexico (TESLA)
9:30 | Deepwater Digital BOP Leak Detection Advances and Next Steps (Innovative Pressure Testing, LLC) | Operationalizing the HSE Case (Shell) | Asphalte Deposition in Sub Sea Systems (Chevron) | Shallow Hazard Interpretation and Evaluation for Regulatory Compliance (C&C Technology)
10:00 | New/Unusual Technology Overview (BOEMRE) Tentative | Robotic Cleaning of Mud Storage Tanks without Human Entry or Liquid Waste Disposal (Baker) | Field Application of a Novel Kinetic Hydrate Inhibitor with Low Emulsion Tendency and No Adverse Affects on Water Quality (Baker Hughes) | Assessing the Environmental Impact of DW Oil Spills Using Acoustics: The GOM Case Study (UL - Lafayette)
10:30 | Automated Workflow to optimize GOM Lower Tertiary Wilcox Sand Reservoirs (Halliburton) | Preventing the Next Explosion Offshore - Area Classification & Temp Equip Issues (Shell) | Redesigned Walnut Shell Filter System for Offshore Operations. (Siemens) | Sizing-Up Stop Work Authority Program Implementation: An Assessment of the Petroleum Industry (NSU)

11:00 to 1:30 - Lunch + Keynote Speaker: William Reilly, Chair - Presidential OIL Spill Commission (GRAND BALLROOM)

DRILLING | RESERVOIR ENGINEERING | PIPELINES | STUDENT SESSIONS
--- | --- | --- | ---
2:00 | Evolution of Hole Enlargement Tools in the DW GOM (Chevron) | Worst Case Discharge Calculations in Federal Waters (Gemini) | Deepwater Pipeline Systems, Concerns, Challenges & Subpart J (BOEMRE) | Effects of Lithogenic Heterogeneity and Focused Fluid Flow on Gas Hydrate Distribution in Marine Sediments (Rice Univ)

3:00 to 3:15 - Break

3:15 | New Generation Flat Rheology Drilling Fluid (MI) | Investigation of Oil-Trapping Mechanisms in Deepwater Gulf of Mexico (Knowledge Reservoir) | Articulating Concrete Mats Utilization in Subsea Systems & Pipelines (Oilstates) | Measurement of Interfacial Tension & Spreading Behavior in Hydrocarbon/Water/Dispersants Systems in Deepwater (LSU)
3:45 | Development of Economical Fluid for SAG Resistance & ECD Management in Narrow Margin Wells (Baroid) | Actual Production Performance and Field-Measured Compaction Permeability Effects for Extremely Unconsolidated Deepwater Turbidite Sand in the Gulf of Mexico (ENI) | Hybrid/Free Standing Risers (2H) | Improving the Quality, Scalability and Usability of Velocity Models (Paradigm)
4:15 | Quantitative cement permeability evaluation for zonal isolation (Schlumberger/DOLL Research) | Reservoir Uncertainties Assessment & Management to Define and Optimize Facility Capacity (Statoil) | TBD | Careers in Geoscience & Engineering (ENI)

4:45 to 6:30 RECEPTION (Exhibition Hall)

SPE Young Professionals Fundraising Social
for the Deepwater Symposium, will feature presenters with knowledge and experience in design, fabrication and installation of deepwater pipelines and feature the official Pipeline representative of the BOEMRE (former MMS) Gulf of Mexico, who will provide an update on regulatory requirements for pipelines. Presentations will explore creative solutions and illustrate new methods to overcome some of the technological hurdles that will help lead the industry to a safer, smarter and stronger 2012 deepwater Gulf of Mexico and meet the challenge of new regulatory requirements.

**Well Completions & Interventions**

**Bill 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. However, introducing new technologies to limit workovers 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 on operational readiness and additional considerations as a result of updated regulatory requirements.

**Student Papers**

**Emmitt Lockard (ENI Petroleum),**

The Deepwater Technical Symposium is committed to providing students the opportunities to enhance their university education. The symposium provides an excellent opportunity for students to learn more about the technical solutions that the oil and gas industry applies to problems encountered in the exploration and production of oil and gas in the Deepwater Gulf of Mexico. This session features oral and poster presentations from students, university professors and industry that are focused on topics of interest to students and delegates attending the symposium.

---

**FRIDAY, AUGUST 12**

<table>
<thead>
<tr>
<th>7:00 to 8:00 AM – Continental Breakfast</th>
<th>(Exhibition Hall)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GEOSCIENCE</strong></td>
<td><strong>PRODUCTION SYSTEMS</strong></td>
</tr>
<tr>
<td>Salt welds in the Gulf of Mexico – Uncertainties in the Amount of Remnant Salt: Seismic and Well Examples (Chevron)</td>
<td>Perdido Subsea Processing (Shell)</td>
</tr>
<tr>
<td>The Pony Discovery, Green Canyon Block 488: Structural Evolution and Salt Tectonics (Hess)</td>
<td>Water Quality LDHI System Tahiti Production Equipment (Chevron)</td>
</tr>
<tr>
<td>The Pony Discovery, Green Canyon Block 486: Depositional Facies and Reservoir Architecture of Miocene Turbidite Reservoirs (Hess)</td>
<td>Produced Water Excursions (CETCO)</td>
</tr>
</tbody>
</table>

10:00 to 10:15 - Break

<table>
<thead>
<tr>
<th>10:15</th>
<th><strong>EMERGING TECHNOLOGY</strong></th>
<th><strong>DRILLING/HSE</strong></th>
<th><strong>COMPLETION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>A new standard in real-time LWD Sonic capability: Improving confidence in pore pressure &amp; wellbore stability applications (Schlumberger)</td>
<td>Dual Gradient Drilling in Deepwater - Overview &amp; Learnings to Date (Chevron)</td>
<td>Deepwater - Defining Project Readiness to Assure Operational Excellence (Schlumberger)</td>
<td></td>
</tr>
<tr>
<td>Evaluation of Reservoir Connectivity by Integration of Downhole Fluid Analyses, Asphaltene Equation of State &amp; Laboratory Fluid Analyses (Schlumberger)</td>
<td>HSE Leadership - Setting the Expectation - Frontline to the Office (Shell)</td>
<td>Enhanced Production Packer Performance Optimizes Deepwater Completions (Baker Hughes)</td>
<td></td>
</tr>
</tbody>
</table>

11:15 to 1:30 Lunch + Keynote Speaker: Lars Herbst, GOM Regional Director BOEMRE (Grand Ballroom)

**PLENARY SESSION - GRAND BALLROOM**

**Deepwater Operations Post Macondo - Industry Expert Panel Discussion**

Tim Achee - Intervention Engineering Advisor, DW E&P (Chevron)

Joe Leimkuhler - Offshore Well Delivery Manager (Shell)

David Coatney - Managing Director, Helix Well Containment Group

Marty Massey - CEO, Marine Well Containment Company (MWCC)

Capt Peter Gautier (USCG)

3:45 Passport Awards and Closing Remarks, Joe Leimkuhler (Grand Ballroom)
Masquerade Gala & Silent Auction

Join industry professionals at the Grand Oaks Mansion located inside the historic museum.

August 11, 2011
Blaine Kern’s Mardi Gras World
380 Port of New Orleans, New Orleans
7:00 – 10:00 pm

Registration $60 per person
Cocktail Attire, Coat & Tie
Masking Encouraged

100% proceeds benefit core element Greater New Orleans Science Technology, Engineering & Mathematics initiative

SYMPOSIUM REGISTRATION

REGISTRATION FEE INCLUDES:
• Access to Technical Sessions, Management Panel Sessions and Student Poster Sessions
• Invitation to Keynote Speaker Sessions and lunch on August 11 and 12
• Invitation to evening social - August 11
• Entry to exhibit halls

Onsite Registration FEES

<table>
<thead>
<tr>
<th></th>
<th>USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPE/AADE/NOGS MEMBERS</td>
<td>300</td>
</tr>
<tr>
<td>NON-MEMBERS</td>
<td>350</td>
</tr>
<tr>
<td>Gala tickets purchased individually or added to registration</td>
<td>60</td>
</tr>
<tr>
<td>STUDENT REGISTRATION: Must register online. No Free onsite student registration.</td>
<td>FREE</td>
</tr>
</tbody>
</table>

Mastercard, VISA, American Express accepted

Cancellations: 100% refund granted for requests received before August 5, 2011. No refunds after August 5, 2011.

Attendance at the Deepwater Symposium will be limited. Please register early.

For additional information, please contact General Chairperson,
Joseph M. Leimkuhler (504) 728-7117
joe.leimkuhler@shell.com

REGISTER ONLINE TODAY

www.deepwaternola.org

REGISTRATION OPEN

DAY 1:  6:30 AM to 3:00 PM
DAY 2:  6:30 AM to 10:00 AM

EXHIBITION HALL OPEN

DAY 1:  6:30 AM to 3:00 PM
DAY 2:  6:30 AM to 1:30 PM

Why Exhibit in 2011?
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 & exhibits, contact:
David Weekley
d.weekley@shell.com  (504) 728-4561 or
Gary Fanguy
gary.fanguy@nabors.com, (985) 209-3649

ACCOMMODATIONS

Hilton Riverside Hotel New Orleans
2 Poydras Street
New Orleans, LA 70140
(504) 561-0500
REFERENCE CODE: DTS

*Free parking available at Mardi Gras World. Alternatively, a free shuttle service will be provided between the Hilton Riverside and Mardi Gras World for the duration of the event.
JOIN US and
ENROLL NOW

www.deepwaternola.org

August 11th and 12th, 2011

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

SPONSORS

GOLD SPONSORS

Silver Sponsors

Bronze Sponsors

Coffee Break

SRTCC
15th Annual Gulf of Mexico Technical Symposium

Society of Petroleum Engineers
PO Box 52737
New Orleans, LA 70152

JOIN US and ENROLL NOW
www.deepwaternola.org