The Fourteenth 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
- Alternative Energy
- Emerging Technologies
- Geoscience

August 18th and 19th, 2010
New Orleans

14th Annual Gulf of Mexico
Deepwater Technical Symposium

www.deepwaternola.org

Hilton New Orleans Riverside

Held at the Hilton New Orleans Riverside Hotel

PROUDLY HOSTED BY
KEYNOTE SPEAKERS

Wednesday, AUGUST 18 – 12:15 PM
Richard Pattarozzi
Deepwater Pioneer, Author of "Deepwater Exploration and Production - A Non-technical Guide" and former President and CEO of Shell Deepwater
"Deepwater, From the Beginning To New Frontiers"

Thursday, AUGUST 19 – 12:30 PM
John Hollowell
Shell - Executive VP of Deepwater Development
"Offshore Development Going Forward – An Operator’s View"

SESSION SCHEDULE

Well Completions & Interventions
William Franke (Expert E&P), Henrik Larsen (Shell), Marshall N. Smith (Halliburton), Alan Holley (Halliburton)

The successes of Deepwater Completions & Interventions are heavily dependent on project cost and the value of increased oil and gas production. New technologies, adapted existing technologies, and operational techniques have evolved into the deepwater arena to ensure this success and added value. Deepwater GOM operators are realizing value from increased recoverable reserves as well as reduced cost resulting from increased focus on developing innovative ways to complete and intervene deepwater wells. Operators have also focused on adapting proven brownfield technologies to the deepwater arena to further increase project value.

The Completion and Intervention Session will explore a variety of completion & intervention topics that focus on reducing the cost, limiting the operational risk, and increasing project value. The following topics will cover technologies and techniques used to meet the specific challenges of deep water: Flow Assurance, Trapped Annular Pressure, Sub-Sea Well Access, Improved Real-time Decision Making Through Better Down-Hole Data, Artificial Lift, and Reducing Losses in High-Over-Balance Wells.

Drilling Technology
Dave Algu (Shell), Ken Dupal (Expert E&P Consultants), Ashley W. Breaux (Chevron), Ronnie Faul (Halliburton)

Drilling comprises the majority of the cost for an exploratory well and a substantial portion of the cost for a development project. Drilling engineers must provide well designs and select appropriate technology to achieve the project goals - drill the well on time, within budget. The quality and well integrity should be suitable for production for the life of the well. Drilling technology and innovative solutions can act as enablers for exploratory wells and can provide tools to minimize time and/or risk for development projects. The presentations in this session include technical advances in a variety of areas, including BHA vibrations, fluids, expandable tubulars, and riserless mud recovery. Case studies for extended reach wells and field development solutions are also included.

Production Systems
Allen Wiley (Multi-Chem), Casey Blake (Shell)

Operating systems in deepwater have shown significant advancement over the last few years as we go deeper and further in the Gulf of Mexico and as production volumes increase demands tax production systems on a daily basis. The Mineral Management Service (now Bureau of Ocean Energy Management) is stringent in their overview of ongoing production operations making sure that all guidelines are followed and aligned to regulations. Our program this year will provide a look at some exciting new equipment, production enhancement applications and flow assurance case histories that exhibit cutting edge technology which will impact production systems and deliverables for the future.

Alternative Energy
Sara Tyler (Shell Wind), Art Johnson (Hydrate Energy)

While the extensive deepwater infrastructure of the Gulf of Mexico offers intriguing new energy opportunities beyond conventional oil and gas development, it will take time to “step-out” and harness these resources at meaningful levels. Wind energy is among the most promising utility-scale alternative energy sources currently available; top challenges for offshore wind development include appropriate siting, proper resource assessment, and automated processes for deploying offshore wind technology such that the cost of offshore wind is brought down to down to competitive levels. This session includes a discussion of the case for safety excellence in all energy industries.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Venue</th>
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<tbody>
<tr>
<td>9:00</td>
<td>First Floating Production, Storage and Offloading Vessel in the US Gulf of Mexico (Petrobras USA)</td>
<td>Salon C</td>
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<td>9:30</td>
<td>Steerable Drilling Liner System Technology (Baker Hughes Inc)</td>
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<td>10:00</td>
<td>Cost Effective ESP Well Intervention in Deepwater Subsea Applications (Schlumberger Oilfield Services)</td>
<td>Grand Ballroom D</td>
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<td>10:30</td>
<td>Tour of The Thunder Hawk Deep Draft Semi and Key Operational Advances (SBM Atlantis Inc)</td>
<td>Salon B</td>
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<tr>
<td>12:15</td>
<td>Key Note #1 - GRAND BALLROOM - Rich Pattarozzi, “DEEPWATER, FROM THE BEGINNING TO NEW FRONTIERS”</td>
<td>Lunch - GRAND BALLROOM</td>
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<tr>
<td>13:45</td>
<td>Pushing the Casing Points Deeper – Case Study of Riserless Mud Recovery in the Gulf of Mexico (Baker Hughes Inc)</td>
<td>Salon C</td>
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<td>14:15</td>
<td>A Case History of Auger TLP Cardamom Deep ERD well - The deepest &amp; longest sidetrack drilled to-date in the GOM (Shell)</td>
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<td>14:45</td>
<td>An Overview of Loss Prevention and Wellbore Strengthening – Challenges, Recent Advances and Case Examples (MI)</td>
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**HS&E / Regulatory**

**Gary Roebke (Chevron), Steve St Amand (Century Exploration N.O.)**

Exploring the safety culture of the E&P industry and verifying competency on safe work practices are the focus areas of this session.

DuPont will discuss the Safety Culture Improvement Process, developed to understand employee perceptions about their safety management systems, both at the individual and organizational level. The Safety Culture Perception Survey has been taken by more than 450,000 employees in 41 countries, across a range of industries. This large database allows examination of differences in safety culture between divisions or locations of a company, companies within an industry, and between industries. The paper will discuss ways to identify and quantify the behaviors, attitudes, and other factors that can make or break a safety program, the relationship between safety culture and safety performance, where the petroleum industry stands among other industries in safety performance, what separates most E&P companies from the benchmark best, and where the E&P industry can improve.

In the Second Focus area, Chevron will discuss a recently developed process designed to confirm and increase competency levels of our GOM Contract Business Partners workforce on Chevron Safe Work Practices (SWP) expectations. The process consists of SWP Assessments that targets all Contract Persons Leading Work (PLW) and randomly
samples other non-PLW positions. It provides accountability to Business Partners based on the SWP competencies of their Employees. Our HSE topics will conclude with an interesting presentation on Safety Cases, which are now required for Deepwater Drilling Operations by the BOEM. Morris Burch will cover Offshore Safety Cases, the Good, the Bad and the Ugly. A timely paper given the new requirement.

**Emerging Technologies**

**Angie Gobert (BOEMRE), Ashley W. Breaux (Chevron)**

The technical limits of the offshore oil and gas industry evolve as we continue EXPANDING THE FRONTIER. As our industry forges ahead into areas of ever increasing difficulty and as the cost of deepwater projects continues to increase, industry leaders develop creative approaches to meet today’s technological and financial hurdles. Hostile geologic environments, deep wells, ultra-deep water depths, loop currents, and severe storms combine to provide some of the most challenging conditions faced anywhere in the world. Presentations in this session illustrate new drilling and production concepts and technologies and describe the novel and cost-effective engineering solutions for two deepwater projects that have been developed to meet the conditions and challenges of EXPANDING THE FRONTIER.

**Geoscience**

**Bob Meltz (Chevron), Richard Mongan (Chevron)**

The Geoscience community has continued to “expand the frontier” of the Deepwater Gulf of Mexico. Geoscientists are integral components to the Deepwater value chain and proponents of implementing the innovations necessary in the pursuit of this challenge. This year’s presentations illustrate this with topics ranging from the value of understanding the gulf basin from “mantle-to-seep” in the ongoing search for hydrocarbons, to the geomechanical challenges of drilling in and around complex salt structures. We will hear about the prolific Miocene reservoirs of the Western Atwater Fold belt, and a number of talks on the value of state-of-the-art LWD data in providing real-time drilling solutions in a Mars case study, novel approaches to laminated pay analyses, and in detecting shallow drilling hazards.

**Reservoir & Economics**

**Paul Morphy (Shell), Peter J. Clifford (BP), Didier Terroir (ENI Petroleum)**

This session addresses some of today’s most challenging issues facing deepwater developments as well as some of the newest results:

- A look back study of Appraisal Programs. How well do we actually predict rates and reserves in the deepwater Gulf of Mexico?
- Do additional appraisal wells improve the prediction?
- A look at BP’s Cascade-Chinook fields
- The challenges of extending the EOR processes to the Deepwater.
- Two presentations on Low-salinity water flooding.
- Field-measured permeability reduction due to compaction compared with lab predicted.

**Student Papers**

**Emmitt Lockard (ENI Petroleum), Ashley W. Breaux (Chevron), Melissa L. Nance (Shell)**

<table>
<thead>
<tr>
<th>THURSDAY AUGUST 19</th>
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<tbody>
<tr>
<td><strong>DAY 2</strong></td>
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<td><strong>PRODUCTION SYSTEMS</strong></td>
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Masquerade Gala

Join industry professionals for an evening of dance and revelry in the traditional New Orleans style

Harrah’s New Orleans Vieux Carre Ballroom

August 18

8:00 – 11:00 pm

$50/person (includes hors d’oeuvres and drinks)

Cocktail attire; masking encouraged

For ticket information contact m.nicley@shell.com

Raffle tickets available before & during the Gala

Proceeds benefit Core Elements: Greater New Orleans Science, Technology, Engineering and Math Initiative

To learn more about Society of Petroleum Engineers and Greater New Orleans STEM, please visit sped-delta.org and core4kids.org

Invitation to evening social - August 19.
The date should be August 18.
REGISTRATION FEE INCLUDES:
• Access to Technical Sessions, Management Panel Sessions and Student Poster Sessions
• Invitation to Keynote Speaker Sessions and lunch on August 18 and 19
• Invitation to evening social - August 18
• Entry to exhibit halls

Onsite Registration FEES

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<th>Membership Type</th>
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<tr>
<td>SPE/AADE/NOGS MEMBERS</td>
<td>USD $300</td>
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<tr>
<td>NON-MEMBERS</td>
<td>USD $350</td>
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<tr>
<td>Gala tickets purchased individually or added to registration</td>
<td>USD $50</td>
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<tr>
<td>STUDENT REGISTRATION</td>
<td>FREE</td>
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Mastercard, VISA, American Express and Discover accepted

Cancellations: 100% refund granted for requests received before August 5, 2009. No refunds after August 5, 2009.

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

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

REGISTER ONLINE TODAY

www.deepwateronline.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 6:30 PM
DAY 2: 7:00 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 more details about sponsorships & exhibits, contact Jarred Guthrie, j.guthrie@shell.com (504) 728-6077

ACCOMMODATIONS
Hilton Riverside Hotel New Orleans
2 Poydras Street
New Orleans, LA 70140
(504) 561-0500

REFERENCE CODE: DTS
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August 18th and 19th, 2010

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DATED MATERIAL