

Technical Program: Monday, 1 May

Monday, 1 May, 0930 to 1200 **Room 306**

Benguela-Belize: West Africa's First Compliant Piled Tower

Session Chairpersons:

Daniel Smith, Mustang Engineering
Ed Mascorro, Mustang Engineering

0930 18200

Benguela-Belize Project Overview

C.C. McNeilly, R.V. Redwine, W.G. Higgs, Chevron Corp.,
Southern Africa SBU

0952 18068

Benguela-Belize Compliant Piled Tower: Tower Design

S. Will, E. Mascorro, W. Roberson, K. Hussain, Mustang Engineering;
S. Paulson, Chevron ETC

1014 18080

Benguela-Belize Compliant Piled Tower: Topsides Engineering

M. Borkar, S. Gunzelman, S. Johnston, G. Jones, Kellogg Brown & Root LLC

1036 18077

Benguela-Belize Compliant Piled Tower: Tower Fabrication

F. Sezer, Kiewit Offshore Services Ltd.

1058 18079

Benguela-Belize Compliant Piled Tower: Installation

W. Koolwijk, R. Zoontjes, Heerema Marine Contractors

Monday, 1 May, 0930 to 1200 **Room 604**

Flow Assurance Field Solutions

Session Chairpersons:

Matthew Lamey, Kerr-McGee Oil & Gas Corp.
Laurence Cowie, BP

Keynote

0930 18381

Flow Assurance Field Solutions

N.D. McMullen, BP America Inc.

0952 18384

Flow Assurance Lessons: The Mica Tieback

A.L. Ballard, BP America Inc.

1014 18318

Evaluation of Low-Dose Hydrate Inhibitors for a Long-Distance Subsea Tieback in Ultradeep Water

A.P. Singh, Total E&P U.S.A. Inc.; P. Glenat, J. Peytav, Total S.A.

1036 18316

An Application of Vacuum Insulation Tubing for Wax Control in an Arctic Environment

P. Singh, J.A. Walker, H. Lee, S. Gharfeh, B. Thomason, D. Blumer,
ConocoPhillips

1058 17814

Hydrate Remediation in Deepwater Gulf of Mexico Dry-Tree Wells: A Lesson Learned

A.F. Harun, T.E. Krawietz, M. Erdogmus, BP America

1120 18387

To Pig or Not To Pig: The Marlin Experience With Stuck Pig

G. Fung, W. P. Backhaus, S. McDaniel, M. Erdogmus, BP America

Monday, 1 May, 0930 to 1200 **Room 602**

FPSO Technology

Session Chairpersons:

Max Krekel, BOPS (USA)
John Barnes, AMEC Paragon Inc.

0930 18036

Calibrated Geotechnical Design Code for Suction Anchors in Clay

R. Dahlberg, K.O. Ronold, P.J. Strom, J. Mathisen, Det Norske Veritas;
K.H. Andersen, H. Jostad, Norwegian Geotechnical Inst.

0952 18085

Deepwater Oil Export Systems: Past, Present, and Future

C. Blanc, J. Isnard, R. Smith, Single Buoy Moorings Inc.

1014 17861

Design of FPSO Piles Against Storm Loading

S. Bhattacharya, Oxford U.; T. Carrington, T. Aldridge, Fugro Ltd.

1036 18061

Recent Trends in FPSO Design and Project Execution Applied to Leased Vessels

M.W. Wyllie, J. Joynson, Single Buoy Moorings Inc.

1058 18271

Experience With a Dynamically Positioned FPSO in a Hurricane Area

M. Zoethout, H. Brugs, Bluewater Energy Services B.V.

1120 18279

Upgrade of DP Failure Mode Effects Analysis

P. Fougere, Transocean; A.A. Pallaoro, Petrobras E&P Service

1142 18039

Investigation of Sway-Yaw Motions of Deepwater FPSOs

C. Paton, C.J. Carra, P. Sincock, AMOG Consulting

Monday, 1 May, 0930 to 1200 **Room 312**

Drilling Technology

Session Chairpersons:

Dennis Dal Porto, Chevron Corp.
Chip Claiborne, Chevron Corp.

0930 17970

Drilling a Deepwater Wildcat Off the North Coast of Brazil: A Case Study

D.M. Sparkes, J.S. Wellings, G. Rheume, BP plc

0952 17828

Single-Diameter Technology Capable of Increasing Extended-Reach Drilling by 50%

R. Bell, R. McKee, E. Zwald, Enventure Global Technology; D. Lewis,
P.V. Suryanarayana, Blade Energy

1014 17999

When Intelligent Wells are Truly Intelligent, Reliable, and Cost-Effective

G. Naldrett, D. Ross, Schlumberger

1036 17840

Through-Tubing Rotary Drilling From Njord Floating Platform

J.I. Tistel, Hydro Oil and Energy; J.Oyovwevotu, Leading Edge Advantages;
S. Talukdar, K. Kjosnes, L.H. Brusdal, Hydro Oil and Energy

1058 18122

First-Year Simulation of Drilling and Completion Operations on the Atlantis Project

R. Shilling, BP Exploration & Production Technology; W.J. Brendling, BMT Fluid Mechanics Ltd.

1120 17830

Solid Expandable Tubular Systems Extend the Life of Mature Fields

D.E. Eynon, Marathon Oil Co.; J.S. Mueller, Vasco; S. Felix, N. Ruzic, Enventure Global Technology; P. Courty, Cudd Pressure Control Inc.

Monday, 1 May, 0930 to 1200**Room 610****Applications of VSPs to Imaging, Anisotropy and Pressure Prediction****Session Chairpersons:**Brian Hornby, BP
Jorge Lopez, Shell Intl. E&P Inc.

0930 17988

A Novel Walk-Away VSP for Improved Subsalt Imaging

G. Ronholt, B. Chenin, Read Well Services Ltd.; R.D. Shank, Chevron U.S.A. Inc.

0952 17857

Subsalt Elastic Velocity Prediction With a Look-Ahead AVA Walkaway

W.S. Leaney, Schlumberger; B.E. Hornby, BP

1014 18399

Travel-Time Methods of Vp/Vs Determination for Pore Pressure Prediction Using Lookahead VSPs

D. Ebrom, BP America; P.D. Heppard, ConocoPhillips; M.L. Albertin, BP America

1036 18262

Improving Drilling Efficiency Using a Look-Ahead VSP to Predict Pressure Exiting Salt: Five Gulf of Mexico Examples

S.M. Viceer, M.L. Albertin, P. Vinson, B.E. Hornby, D. Ebrom, P.D. Heppard, C. Jay, J.P. Blangy, BP America Inc.

1058 17869

Accurate Estimation of Subsalt Velocities Using Virtual Checkshots

A. Mateeva, A. Bakulin, P. Jorgensen, J.L. Lopez, Shell Intl. E&P Inc.

1120 17866

Anisotropy Estimation From Marine 3D VSP Data

V. Grechka, P. Jorgensen, J.L. Lopez, Shell Intl. E&P Inc.

1142 18177

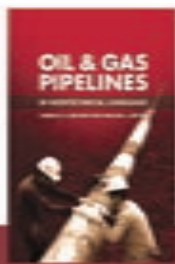
Anisotropy Evaluation Using an Array Walkaway VSP

R. Zhou, VSFusion; A. Kaderali, Husky Energy

PennWell Books

Visit us in Booth 2941 to see our latest titles and
save with our 10% show discount!

Don't miss our book signing 1-2 p.m. Monday
with Jim Hutton, William Leffler, Martin Raymond,
and Thomas Miesner.



Monday, 1 May, 0930 to 1200**Room 606****Offshore Wind Energy****Session Chairpersons:**Claude Brancart, NextFish
Walt Musial, Natl. Renewable Energy Laboratory**Keynote 0930****Regulatory Aspects of Offshore Wind Energy**

Johnnie Burton, Director, MMS

0952 18355**Energy From Offshore Wind**

W.D. Musial, S. Butterfield, Natl. Renewable Energy Laboratory; B. Ram, Energetics Inc.

1014 18353**Status of Cape Wind Offshore Wind Project**

C.D. Olmsted, Energy Management Inc.

1036 18351**Feasibility of Offshore Wind Power in the South Atlantic Bight**W.S. Bulpitt, S.W. Stewart, M.H. Hunt, S.V. Shelton,
Georgia Inst.: Strategic Energy Initiative**1058 18352****Important Measurement Parameters for Determining Loading and Energy Production on Offshore Wind Turbines**B. Bailey, M. Filippelli, AWS Truewind LLC; J.M. Freedman,
Atmospheric Information Services**1120 18359****Application of Design Standards to the Design of Offshore Wind Turbines in the U.S.**N.J. Tarp-Johansen, Risø Natl. Laboratory; J.F. Manwell, J. McGowan,
U. of Massachusetts Amherst**1142 18287****Coupled Dynamic Modeling of Floating Wind Turbine Systems**E.N. Wayman, P.D. Sclavounos, Massachusetts Inst. of Technology;
S. Butterfield, J. Jonkman, W. Musial, Natl. Renewable Energy Laboratory**Monday, 1 May, 0930 to 1200****Room 600****Production Optimization Technology****Session Chairpersons:**Rusty Bayh, Halliburton Energy Services Group
Didier Gazaniol, Total S.A.**0930 17880****Optimizing Production Rates and Reducing Life-Cycle Cost for High-Pressure Fields**

S. Patni, FMC Technologies

0952 18121**Fiber-Optic Downhole Sensing: A Discussion on Applications and Enabling Wellhead Connection Technology**

P.J. Wright, W. Womack, Ocean Design Inc.

1014 18214**Sandface Completion for a Shallow Laminated-Gas Pay With High Fines Content**N.S. Hadfield, J.H. Terwogt, A. Van Kranenburg, Sarawak Shell;
S. Salahudin, K.A. King, Halliburton Energy Services Inc.**1036 17796****Intelligent Well Technology: The Evolution to Closed-Loop Control**

W.S. Going, A.B. Anderson, Baker Oil Tools; G.P. Vachon, Baker Hughes

1058 17998**Optimizing Production in Offshore Scenarios by In-Situ-Generated Nitrogen**

A.C. Vargas, Weatherford Intl. Ltd.

1120 17867**Intelligent Multilateral Wells Provide Significant Benefits in Environments Ranging From Heavy-Oil Shallow Onshore Wells to Difficult Subsea Well Construction**

B. Sponchia, B. Emerson, J. Johnson, Baker Oil Tools

Monday, 1 May, 1400 to 1630**Room 306****Panel: Decision Making, Ethics and Professionalism****Moderators:**Buford Pollett, Technip
Daniel Orange, AOA Geophysics Inc.**Panelists:**Paul Barshop, COO, Independent Project Analysis
Pat Galloway, PE CEO, Nielsen-Wurster Group Inc.
Peter Rose, President, AAPG
Lorne Thomas, Captain, U.S. Coast Guard Office of Operating and Environmental Standards
Alan Boeckmann, Chairman and CEO, Fluor Corporation
Scott Tinker, Bureau of Economic Geology, U. of Texas**The panel will assist engineers, geologists and other offshore industry professionals in understanding how decision making procedures, ethics, professionalism boundaries and potential liabilities evolve as the industry deals with the risk surrounding new developments in the offshore energy industry.****1400 18402****In New Horizons and in New Depths: Where are the Ethical Boundaries and Potential Liabilities Facing the Offshore Energy Industry?**B. Pollett, Senior Attorney (TX & LA) and Licensed Texas Geologist;
C. Nielsen, Winstead Sechrest & Minick P.C.**Monday, 1 May, 1400 to 1630****Room 604****Lessons Learned From Hurricane Ivan****Session Chairpersons:**Robert Spong, Energo Engineering
Robert Gilbert, U. of Texas**Keynote 1400****Lessons Learned From Hurricane Ivan**

Tommy Laurendine, MMS

1422 18323**A Pilot Study for Regionally-Consistent Hazard Susceptibility Mapping of Submarine Mudslides**

C. Hitchcock, R. Givler, M.M. Angell, William Lettis & Assocs. Inc.; J. Hooper, Fugro-McClelland Marine Geosciences Inc.

1444 18328**Mudflows and Mudslides During Hurricane Ivan**M.C. Nodine, S.G. Wright, R.B. Gilbert, U. of Texas at Austin; E.G. Ward,
Offshore Technology Research Center

1506 18325

Assessment of Fixed Offshore Platform Performance in Hurricanes Ivan

F. Puskar, R. Spong, A. Ku, Energo Engineering Inc.; Y.J. Choi, U. of Texas

1528 18322

MODU Performance in Hurricane Ivan

B. Sharples, Offshore Risk & Technology Consulting Inc.; S. Buffington, MMS

1550 18324

Assessment of Storm Sea Fastenings for Drilling and Workover Rigs on Floating Production Systems During Hurricane Ivan: Phase 1

E.G. Ward, Offshore Technology Research Center; J. Gebara, Technip Offshore Inc.

1612 18183

Hurricane Ivan: Pipeline Damage, Integrity Assessment, and On Bottom Stability Observations

S. Mirza, J. Skinner, A. Mathew, L. Ekstrom, Det Norske Veritas

Monday, 1 May, 1400 to 1630**Room 602****Managed-Pressure Drilling: Zeroing In On Technology****Session Chairpersons:**Tom Gee, Weatherford Intl. Ltd.
Rick Fowler, Dominion E&P Inc.

1400 17967

Use of Rotating Control Devices in High-Pressure/High-Temperature Applications in Brazil Provides Economic and HSE Benefits

A.C. Vargas, Weatherford Intl.

1422 17818

Deepwater Drilling Made More Efficient and Cost-Effective: Using the Microflux Control Method and an Ultralow Invasive Fluid to Open the Mud-Weight Window

H.M. Santos, P.I. Reid, Impact Solutions Group; J. McCaskill, J. Kinder, Power Well Services; J.R. Kozicz, Transocean

1444 18375

A Process Used in Evaluation of Managed-Pressure Drilling Candidates and Probabilistic Cost-Benefit Analysis

R.R. Brainard, RRB Energy Inc.

1506 17885

Variations of Managed-Pressure Drilling Currently Practiced: Offshore Case Studies

D.M. Hannegan, Weatherford Intl. Ltd.

1528 17798

Managed-Pressure Drilling: Techniques and Options for Improving Efficiency, Operability, and Well Safety in Subsea TTRD

B. Fossli, Ocean Riser Systems AS; S. Sangesland, O. Sunde Rassmussen, P. Skalle, Norwegian U. of Science & Tech.

1550 18038

Field Trials of a Managed-Pressure Drilling System Demonstrate the Actual State of the Technology

E.F. Nogueira, A. C. Lage, J.F. Da Silva, Petrobras; H. Santos, Impact Solutions Group

1612 17990

Current Accumulator Design Methods are Inadequate for Deepwater Drilling

M. Amani, Texas A&M U. at Qatar; M. Mir Rajabi, H.C. Juvkam-Wold, J.J. Schubert, Texas A&M U.

Monday, 1 May, 1400 to 1630**Room 312****Interaction of Deepwater Pipelines With the Seabed****Session Chairpersons:**Bruce Light, Shell Intl. E&P Inc.
John Bomba, Technip Offshore Inc.

1400 17806

Combined Effect of Flowline Walking and Riser Dynamic Loads on HP/HT Flowline Design

M.S. Brunner, X. Qi, J. Zheng, J.C. Chao, Technip U.S.A.

1422 17945

Pipeline Walking: Understanding the Field Layout Challenges and Analytical Solutions Developed for the Safebuck JIP

M. Carr, F. Sinclair, D.A. Bruton, Boreas Consultants

1444 17944

Pipe-Soil Interaction Behavior During Lateral Buckling, Including Large-Amplitude Cyclic Displacement Tests by the Safebuck JIP

D.A. Bruton, Boreas Consultants; D. White, Cambridge U.; C. Cheuk, City U. of Hong Kong; M. Bolton, Cambridge U.; M. Carr, Boreas Consultants

1506 17922

Methods for Assessing Design Issues With HP/HT Pipelines at Early Stages of a Project

N.F. Parsloe, P. Manchec, A. Dorbec, Doris Engineering; X. Yang, Doris Inc.

1528 17795

Lateral Buckling Reliability Calculation Methodology Accounting for Buckle Interaction

G. Brown, M. Brunner, X. Qi, Technip; I. Stanley, Genesis

1550 17815

Mitigation Methods for Deepwater Pipeline Instability Induced by Pressure and Temperature Variations

D. Perinet, I. Frazer, Acergy

1612 18107

Effect of High-Pressure/High-Temperature Flowlines and Soil Interaction on Deepwater Subsea Development

S. Mebarkia, Chevron Corp.

Monday, 1 May, 1400 to 1630**Room 610****Advances in Riser and Umbilical Technology****Session Chairpersons:**Darrel Harvey, Alan C. McClure Assocs. Inc.
Enda O'Sullivan, MCS

1400 18303

New Industry Guidelines for Fatigue Analysis of Unbonded Flexible Risers

F. Grealish, R.J. Smith, MCS; J. Zimmerman, ExxonMobil

1422 17768

The Future for Flexible Pipe Riser Systems in Deep Water: Case Studies

T. Hill, Y. Zhang, T. Kolanski, Wellstream Intl. Ltd.

1444 17986

Predicting, Measuring, and Implementing Friction and Bending Stresses in Dynamic Umbilical Design

K. Ekeberg, T. Ottesen, J. Aarstein, Nexans Norway AS; S. Saevik, N. Ye, R. Iglund, MARINTEK

1506 17764

Riser Strategies: Fatigue Testing and Analysis Methodologies for Flexible Risers

R.A. Clements, N. Jamal, T. Sheldrake, Wellstream Intl. Limited

1528 18202

Dynamic Analysis of Pipe-in-Pipe Steel Catenary Risers With Direct Modeling of Structure Interaction

C. Masson, J. Fang, D. Jordan, INTEC Engineering; P.R. Hays, Chevron

1550 17787

Full-Scale Testing of Flexible Riser System Subjected to Internal Flow-Induced Vibration

M. Every, Sound Research Laboratories; H. Goyder, Cranfield U.; T.P. Jee, Trevor Jee Assocs.; R. Swindell, Bureau Veritas; L. Billingham, BP Exploration and Operating Co.

1612 18065

New Flexible Deepwater Offloading Line

L. Rampi, P. Lavagna, Single Buoy Moorings; D. Mayau, Trelborg

Monday, 1 May, 1400 to 1630**Room 606****Subsea and Riser Integrity Management****Session Chairpersons:**Metin Karayaka, Chevron Energy Technology Co.
Ricky Thethi, 2H Offshore Inc.

1400 17891

Riser Integrity Management for Deepwater Developments

H. Cook, D. Dopjera, BP; R. Thethi, 2H Offshore Inc.; L. Williams, iicorr Ltd.

1422 18310

SCR Integrity Management: Recent Industry Advancements With a Risk-Based Approach

R. Quinn, K. Kavanagh, MCS

1444 17810

NDP Review of State of the Art in Riser Monitoring: Lessons Learned and Experiences Gained

M. Chezian, K.J. Mork, Det Norske Veritas; T.S. Meling, Statoil; C. Makrygiannis, BP; P. Lespinasse, Total

1506 17932

Monitoring and Effective Integrity Management of Laterally Buckled Flowlines in Deep Water

J. Baker, D.A. Bruton, I. Matheson, Boreas Consultants Ltd.

1528 17951

The Successful Development and Deployment of a Reusable Composite Shape-Sensing Mat To Provide Real-Time Load and Cumulative Fatigue Data on Deepwater Production Risers in the Gulf of Mexico

D.G. Roberts, Insensys; T. Moros, BP Exploration

1550 17864

Developments in Assessment of Fluid-Loading Regime Contributions to Fatigue for Deepwater Flexibles

G. Lyons, BPP Technical Services; F. Trarieux, M.H. Patel, Cranfield U.; S. Garnham, BP

Monday, 1 May, 1400 to 1630**Room 600****Flow Assurance Design****Session Chairpersons:**Kazuiohi Minami, Petrobras
Thomas Sifferman, Consultant

1400 17963

An Investigation of Two-Phase Oil-Water Paraffin Deposition

G.H. Couto, H. Chen, E. Dellecase Crude-Oil-Carrying Scanpower, C. Sarica, M. Volk, U. of Tulsa

1422 18368

Experimental and Modeling Studies of Wax Deposition in Crude Oil Carrying Pipelines

S.K. Todi, Scandpower Petroleum Technology Inc.; M.D. Deo, U. of Utah

1444 18317

A Comprehensive Solubility Model for Asphaltenes Flocculation Prediction at Field Conditions

S. Gharfeh, P. Singh, K. Kraiwattanawong, D. Blumer, ConocoPhillips

1506 17894

Flow Assurance Modeling: Reality Check and Aspects of Transient Operations of Gas/Condensate Pipelines

L. Hagesaether, K. Lunde, F. Nygard, Statoil; H. Eidsmoen, Scandpower Petroleum Technology

1528 17956

Evaluating Transient Multiphase Model Performance for the Brazilian Offshore Environment

E.F. Gaspari, G.H. Oliveira, M. Monteiro, R.J. Dourado, Petrobras S.A.

1550 18388

Gulf of Mexico Field of the Future: Subsea Flow Assurance

R. Gudimetla, A. Carroll, BP; K. Havre, C. Christiansen, J. Canon, Scanpower Petroleum Technology Inc.

Technical Program: Tuesday, 2 May

Tuesday, 2 May, 0930 to 1200 **Room 306**

Panel: Independent Spirits Driving Offshore Industry

Moderators:

Gregory Carter, Nautilus Offshore Co. Inc.
Sandeep Khurana, J P Kenny Inc.

Panelists

Brian Reinsborough, Vice President, Exploration, Nexen Inc.
Earl Reynolds, Vice President and General Manager, Devon Energy
Gene Van Dyke, Chairman and CEO, Vanco Energy
John Simon, Vice President, Development, Amerada Hess Corp.
Cory Loegering, Vice President, Deepwater, Mariner Energy
Bertrand Van Den Berghe, Exploration Manager, Geopetrol Intl.

In the past 10 years, Independents have record-breaking production replacement ratio of 135 percent, compared to the industry norm of 80 percent. Because of their entrepreneurial spirit, independents have used their small size and flexible approach to design more-efficient development plans and participate alongside majors in high-impact discoveries that include deepwater and ultra-deepwater fields, international activities, and marginal developments.

Independents are now poised to play an important role in growing worldwide energy demand. The panelists will discuss some of the strategies independents have adopted to continue this trend. The panelists will address the following:

- Production growth vs. reserve replacement
- Stepping out from mature shelf to deepwater and ultra-deepwater regions
- Stretching applied technology envelopes
- Developing strong relationship with industry and government partners
- Building strong technical teams supplemented by global contractors

0930 18363

Independent Spirits Driving the Offshore Industry

E. Reynolds, Devon Energy; G. van Dyke, Vanco Energy; J. Simon, Amerada Hess Corp.; C. Loegering, Mariner Energy; B. van den Berghe, Geopetrol Intl.; S. Khurana, J P Kenny Inc.; G.J. Carter, Nautilus Offshore Co. Inc.

Tuesday, 2 May, 0930 to 1200 **Room 604**

The Gulf of Mexico Under Siege: The Effects of Hurricanes Katrina and Rita

Session Chairpersons:

Stephen Balint, Shell Intl. E&P Inc.
Daniel Orange, AOA Geophysics Inc.

0930 18413

Shell Pipeline's Infrastructure Recovery After Hurricanes Katrina and Rita

M. Coyne, Shell Oil Co. US; J. Dollar, Shell Pipe Line Co.; J. Hardie, SIEP

0952 18414

Observations of Hurricane Impacts on Deepwater Facilities

D.J. Wisch, Chevron

1014 18415

Hurricanes Ivan, Katrina, and Rita: Phenomenal Activity or Signs of Things to Come?

C. Hebert, ImpactWeather Inc.

1036 17995

Extending the Mooring Capability of a Mobile Offshore Drilling Unit

H. Shu, D.A. Loeb, Shell Intl. E&P Inc.

1058 18417

Hurricane Impact Reviewed Through API

P. Versowski, Chevron Inc.; G. Rodenbusch, Shell Intl. E&P Inc.; P. O'Connor, BP Inc.; M. Prins, ExxonMobil Inc.

1120 18418

Hurricane Climate in the Gulf of Mexico

C. Cooper, J. Stear, Chevron ETC

Tuesday, 2 May, 0930 to 1200

Room 602

Deepwater HP/HT, HIPPS and Thermal Performance

Session Chairpersons:

James Pappas, Devon Energy
Doreen Chin, Shell Intl. E&P Co.

0930 18076

Future Considerations for HP/HT Equipment and Systems

F. Koeck, D. Macfarlane, H.B. Skeels, FMC Technologies

0952 17927

Ultra-deep HP/HT Completions: Classification, Design Methodologies, and Technical Challenges

B.A. Maldonado, A.J. Arrazola, B. Morton, Baker Oil Tools

1014 18169

Commissioning and Startup of the Caesar and Cleopatra Mardi Gras Deepwater Pipelines

S. Sauer, BP; J. Wiseman, INTEC Engineering

1036 18063

Potential Failure Scenario for High-Temperature, Deepwater Pipe-in-Pipe

G. Harrison, BP; W. McCarron, ASGM Engineering

1058 17772

DW RUPE: A Low Capex Deepwater Pipeline Repair System for the Gulf of Mexico

A. Rebello, R.R. Ayers, Stress Subsea

1120 17972

Cool Down Thermal Performance of Subsea Systems Based on Gulf of Mexico Field Experience

J. Davalath, FMC Technologies Inc.; K.A. Stevens, Shell Intl. E&P

Tuesday, 2 May, 0930 to 1200

Room 312

Critical Issues in the Design and Operation of Deepwater Waterflood Systems**Session Chairpersons:**Grant Gibson, Gibson Applied Technology & Engineering LLC
Michael Williams, FMC Technologies Inc.

0930 18345

Waterflooding Experience in Deepwater Environments

S.D. Chappell, Shell Intl. E&P

0952 18340

Waterflood Operability: Process and Chemical IssuesJ. Walsh, Shell E&P Inc.; G. Gibson, GATE LLC; J.F. Fanta, Shell E&P Inc.;
J.F. Langer, Shell Global Solutions Inc.; R.G. Prince-Wright,
Risk-Bytes Inc.

1014 18339

Bonga Water Injection: Subsea Design and Operability ChallengesS. Iyer, V.D. Kiel, M. Boshia, Shell Intl. E&P Inc.; B.O. Momah, G. Huseman,
Shell Nigeria E&P Co.

1036 18342

Monetizing Reserves Faster by Managing Water Better

C. Kalli, Chevron

1058 18347

When is Reservoir Souring a Problem for Deepwater Projects?B. Dunsmore, P.J. Evans, Oil Plus Ltd.; M. Jones, S. Burton,
H.M. Lappin-Scott, U. of Exeter

Tuesday, 2 May, 0930 to 1200

Room 610

Floating and Mooring Systems**Session Chairpersons:**Claude Valenchon, Saipem S.A.
Barbara Thompson, Acergy

0930 18254

Numerical and Experimental Investigations on Deepwater CALM Buoys Hydrodynamic Loads

C. Ricbourg, C. Berhault, A. Camhi, B. Lecuyer, R. Marcer, Principia RD

0952 17872

Tension-Torsion Behavior of Deepwater Synthetic Mooring Lines

P. Davies, P. Bouquet, M. Conte, A. Deuff, IFREMER

1014 18150

The Residual Strength of Damaged Polyester RopeE.G. Ward, Offshore Technology Research Center; R.R. Ayers,
Stress Engineering Services Inc.; S.J. Banfield, N. O'Hear,
Tension Technology Intl. Ltd.; C.E. Smith, T. Laurendine, MMS

1036 18259

Integrated Semi and Steel Catenary Risers in Deepwater and Harsh-Environment ConditionsG. Arnesen, Aker Kvaerner Engineering and Technology; J.I. Dalane,
Statoil; S. B. Aramanadka, Shell; K. Herfjord, Hydro Oil & Energy;
R. Snell, BP; C. T. Stansberg, MARINTEK

1058 17789

Predicting the Torsional Response of Large Mooring ChainsI.M. Ridge, CASAR Drahtseilwerk Saar GmbH; R.E. Hobbs,
Imperial College London, Tension Technology Intl.; J. Fernandez,
Labein Technological Centre

1120 17827

RAPID: A New Approach for Improved Regularity and Decreased Maintenance Costs

T.M. Andersen, L. Thuestad, Statoil; T.A. Thorstensen, MARINTEK

Tuesday, 2 May, 0930 to 1200

Room 606

Worldwide Examples of Reservoir Monitoring: Case Studies From Major Oil Companies**Session Chairpersons:**Ali Tura, Shell Intl. E&P Co.
David Johnston, ExxonMobil Exploration Co.

0930 18219

Monitoring Primary Depletion Reservoirs With Seismic Amplitudes and Time ShiftsA. Tura, T. Barker, P. Cattermole, C. Collins, J. Davis, P. Hatchell,
K. Koster, P.M. Schutjens, P. Wills, Shell Intl. E&P

0952 18376

Preliminary Results of the Genesis Field Time-Lapse Seismic Project, Gulf of MexicoT. Hudson, B. Regel, J. Bretches, P. Condon, J. Rickett, B.P. Cerney,
P. Inderwiesen, R.T. Ewy, Chevron Corp.

1014 18221

Repeated 4D Monitoring of the Girassol Field: Impact on Reservoir Understanding and EconomicsA. Gonzalez-Carballo, P. Guyonnet, B. Levallois, Total E&P Angola;
A. Veillerette, R. Deboiasne, Total

1036 18222

Constraining Reservoir Uncertainty With Frequent 4D Seismic Data at Valhall FieldH.S. Lane, BP America; R.M. Kjelstadli, O.I. Barkved, BP Norge AS;
D. Johnson, BP America; O.J. Askim, BP Norge AS; J.P. Van Gestel,
BP Netherlands

1058 18223

Time-Lapse Seismic at the Heidrun Field: Advantages of Cross-Disciplinary WorkA. Furre, L.H. Nordby, E. Bakken, T. Klov, A.S. Moen, Y.E. Ouair,
Statoil ASA

1120 18400

4D Seismic in Brazil: Experience in Reservoir Monitoring

P.R. Johann, E.A. Thedy, F.A. Gomes, M. Schinelli, Petrobras E&P

Tuesday, 2 May, 0930 to 1200

Room 600

Geotechnical Advancements Applied at Mad Dog**Session Chairpersons:**

Mark Randolph, U. of Western Australia
Suzanne Lacasse, Norwegian Geotechnical Inst.

0930 17914

Geologic Setting of the Mad Dog Mooring System

W.J. Berger, D.L. Lanier, Geoscience Earth & Marine Service Inc.;
P. Jeanjean, BP America Inc.

0952 17862

Geotechnical Site Investigation for the Mad Dog Spar Anchors

E. Liedtke, P. Jeanjean, BP America Inc.; G. Humphrey,
Fugro-McClelland Marine Geosciences Inc.

1014 18004

Integrated Studies to Characterize the Mad Dog Spar Anchor Locations and Plan Their Installation

P. Jeanjean, BP America Inc.; W.J. Berger,
Geoscience Earth & Marine Services Inc.; E.A. Liedtke, BP America Inc.;
D.L. Lanier, Geoscience Earth & Marine Service

1036 18007

Centrifuge Testing on Suction Anchors: Double-Wall, Over-Consolidated Clay, and Layered Soil Profile

P. Jeanjean, BP America Inc.; D. Znidarcic, U. of Colorado at Boulder;
R. Phillips, C-CORE; H. Ko, U. of Colorado at Boulder; S. Pfister, C-CORE;
O. Cincicoglu, U. of Istanbul; K. Schroeder, NGI Inc.

1058 18005

Setup Characteristics of Suction Anchors in Soft Gulf of Mexico Clays: Experience From Field Installation and Retrieval

P. Jeanjean, BP America Inc.

1120 17949

Laboratory Testing and Detailed Geotechnical Design of the Mad Dog Anchors

K. Schroeder, K.H. Andersen, NGI Inc.; K. Tjok,
Fugro-McClelland Marine Geosciences Inc.

1142 17950

Predicted and Observed Installation Behavior of the Mad Dog Anchors

K. Schroeder, K.H. Andersen, NGI Inc.; P. Jeanjean, BP

Tuesday, 2 May, 1400 to 1630

Room 306

General Session I: Reflections On An Industry In Change – Past, Present and Future**Moderators:**

Amy Jaffe, Baker Institute, Rice University

Panelists:

Mark Pease, Senior Vice President, Exploration and Production
Anadarko Petroleum Corporation
Dalton Boutte, President, WesternGeco Schlumberger
Bob Long, Transocean
Alexandre Oliveira, Global Upstream Lead Partner, Accenture
Fisoye Delano, Group General Manager, NNPC
Mohammed Hamel, Head, Energy Studies Division OPEC

During OTC 2000 the general sessions reflected on the challenges facing the offshore oil and gas industry in the new millennium. Today, a number of those challenges remain and new, unexpected ones have emerged. The general session will focus on the changing face of the offshore oil and gas industry, reflecting on the key contributors. Namely, the role of the National Oil Company, technology advances that have opened new frontiers, the continuing search for the most cost-efficient exploration and production, and the influence of crude oil pricing on global economics. Additionally, the panel will address the push toward local content, supply chain sourcing from developing countries and the continued search for human resources to meet the needs of an expanding industry.

The challenges faced at the start of the new millennium have not diminished but in fact have increased, and today we are faced with an industry that is trying to redefine itself. As the roles of national and international oil companies have become more blurred and the search for new oil has intensified to feed the demand of the emerging economies of China and India, there is concern over the security of supply, the protection of intellectual property and the replenishing of an aging workforce. The general session panel will comprise of individuals with the ability to address these and other issues that may be raised by either the moderator or members of the audience.

Tuesday, 2 May, 1400 to 1630

Room 604

Panel: Future of the Gulf of Mexico After Katrina and Rita**Moderators:**

Stephen Balint, Shell Intl. E&P Inc.
Daniel Orange, AOA Geophysics Inc.

Panelists:

Joe Bastardi, AccuWeather
Chuck Enze, Shell International E&P Inc.
Roger Leick, ExxonMobil Development Co.
Chris Oynes, MMS
Tim Juran, Transocean

The 2005 hurricane season will be forever remembered for the destruction delivered upon the Gulf of Mexico region. The one-two punch from Katrina and Rita battered eastern Texas to western Florida, causing massive damage and changing the course of life for millions. Offshore, the oil and gas industry experienced the fury of these storms, with fixed and floating production structures, drilling rigs and even pipelines suffering under the powerful winds and tall waves. As the recovery efforts continue on and offshore, the long-term meaning of these events will be debated.

1400 18410

Future of the Gulf of Mexico After Katrina and Rita

S.W. Balint, Shell Intl. E&P Inc.; D. Orange, AOA Geophysics Inc.

Tuesday, 2 May, 1400 to 1630

Room 602

Energy Bridge LNG Projects**Session Chairpersons:**

Sandeep Khurana, J P Kenny Inc.
Re-Anna Bell, Chevron Corp

1400 18395

Energy Bridge LNG Projects Overview

K. Eisbrenner, Excelerate Energy LLC

1422 18396

Gulf Gateway Energy Bridge: The First Year of Operations and the Commercial and Operational Advantages of the Energy Bridge Technology

J.W. Cook, Excelerate Energy LLC

1444 18393

Permitting, Development, and Construction of the World's First LNG Deepwater Port

R.A. Bryngelson, Excelerate Energy LLC

1506 18398

The Development of the First Energy Bridge Regasification Vessel

P. Janssens, Exmar

1528 18397

Energy Bridge LNG Projects: Technological Innovation To- Date and Into the Future

M.K. Lane, A.B. Nierenberg, Excelerate Energy LLC

1550 18394

Energy Bridge LNG Projects: Future Opportunities and Applications

K. Eisbrenner, Excelerate Energy LLC

Tuesday, 2 May, 1400 to 1630

Room 312

Applying Casing to Drilling: Moving Out**Session Chairpersons:**

Gregory Carter, Nautilus Offshore Co. Inc.
Bob McCavitt, Chevron Corp.

1400 18373

Evaluation of a Casing Drilling Connection Subjected to Fatigue and Combined Load Testing

G. Bailey, GrantPrideco; R.D. Strickler, ConocoPhillips; D. Hannahs, S. Kamruzzaman, GrantPrideco

1422 17845

A Staged Approach to the Introduction of Casing and Liner Drilling

M. Davies, L.I. Clark, E.E. McClain, J. Thomas, Hughes Christensen

1444 18084

Drilling Hazard Mitigation: Reducing Nonproductive Time by Application of Common Sense and High-Value Well Construction Techniques

D. Reid, S. Rosenberg, M. Montgomery, M. Sutherland, P. York, Weatherford Intl.

1506 18270

Advancing the Learning Curve in Drilling With Casing Technology

P. Maggi, ENI; R. Brister, Chevron Corp.; S. Beattie, Weatherford Intl.

1528 18374

Designing High-Angle-Casing Directionally-Drilled Wells

B. Borland, R. Watts, ConocoPhillips; W. Lesso, Schlumberger; T. Warren, Tesco

1550 18158

Development of an Expandable Drill-In Liner Hanger for Use in Problem Well Scenarios: Case History

T. Jackson, P. Smith, Halliburton Energy Services; J. Mota, Shell E&P Co.

1612 18245

Combination of Underbalanced and Rotary Drilling With Casing: An Innovative Approach to Unique Downhole Conditions

C. Chandler, D.S. Genrich, Anadarko Petroleum Corp.; A. Coy, G.N. Doty, J. Stanley, S. Rosenberg, Weatherford Intl.

Tuesday, 2 May, 1400 to 1630

Room 610

Grane Field: Challenges in Heavy Crude Oil**Session Chairpersons:**

Jennifer Bell, Chevron Corp.
Svein Hatlem, Norsk Hydro

1400 18234

Challenges in Heavy Crude Oil: Grane, an Overview

J.A. Haugen, E.S. Jenssen, S. Haltem, Hydro Oil & Energy

1422 18235

The Grane Platform

P.E. Melsom, Hydro Oil & Energy

1444 18236

Seismic Mapping and Monitoring for Well Optimization

J.P. Fjellanger, F. Boen, K.J. Ronning, A. Sabo, A.N. Haaland, Hydro Oil & Energy

1506 18239

Grane Drilling

R.E. Teig, R. Bjorkbom, Hydro Oil & Energy

1528 18237

Reservoir Management and Production Experience of Wells Completed in an Alternating Sand/Shale Formation

O. Skeidsvoll, R. Mybo, O. Middtveit, Hydro Oil & Energy

1550 18240

Production of Heavy Crude Oil: Topside Experiences on Grane

S. Husoy, S. Haltem, Hydro Oil & Energy

1612 18238

Heavy Oil Challenges: Transport, Blending and Marketing

K. Solberg, Hydro Oil & Energy

Tuesday, 2 May, 1400 to 1630

Room 606

The Development of Deepwater Ocean-Bottom Seismic: Definition to Execution**Session Chairpersons:**

Gerard Beaudoin, BP

Graham Openshaw, Consultant

Keynote 1400**Accelerating the Pace of E&P Innovation**

Michelle Judson, BP

1422 17977

The Atlantis OBS Project: OBS Nodes—Defining the Need, Selecting the Technology, and Demonstrating the Solution

G. Beaudoin, S. Michell, BP

1444 17976

The Atlantis OBS Project: Managing the OBS Node Development Evolution

G. Openshaw; Consultant; G. Beaudoin, BP

1506 17978

The Atlantis OBS Project: Developing and Building the OBS Node Technology

S. Mitchell, T. Grisham, Fairfield Industries Inc.

1528 17979

The Atlantis OBS Project: Node Handling and Deployment

J. Thompson, Fairfield Industries Inc.; D. Fraser, Canyon Offshore Inc.; R. Fyffe, Fairfield Industries Inc.

1550 17980

The Atlantis OBS Project: OBS Node Positioning and Management

E. Marc, Fairfield Industries Inc.; E. Primeau, J. Gamulewicz, Geo Century Inc.

1612 17982

Atlantis OBS Project Overview

A. Ross, BP; G. Openshaw, Consultant

Tuesday, 2 May, 1400 to 1630

Room 600

Minimizing the Need for Deepwater Vessels by Towing Flowlines: An Opportunity for Remote Locations?**Session Chairpersons:**

Ian Frazer, Acergy

Claude Brancart, NextFish

1400 18047

Past, Present and Future Towing of Pipelines and Risers

R.J. Brown, RJ Brown Deepwater

1422 18233

Pulling and Towing of Pipelines and Bundles

T. Ley, D. Reynolds, Land & Marine Project Engineering Ltd.

1444 18196

Deepwater Installation of Pipelines and Risers by Towing

I.C. da Cruze, J.D. Davidson, Subsea 7

1506 17826

Development of Towing Techniques for Deepwater Flowlines and Risers

V. Alliot, H. Zhang, D. Perinet, Acergy; S. Sinha, Chevron Corp.

1528 18244

Flowline Towout Option for Deepwater Subsea Tie-Back: Perspectives From a Verification Point of View

K. Eriksson, K. Gulliksen, T. Blakstad, DNV Technology Services

1550 17892

Novel Tow Methods for Deepwater Riser Towers Transportation in West-of-Africa Environment

R. Di Silvestro, F. Casola, G. Fatica, A. Mameli, A. Prandi, Saibos SAS

Technical Program: Wednesday, 3 May

Wednesday, 3 May, 0930 to 1200

Room 306

Panel: Changing Dynamics of Deepwater Ownership

Moderator:

Sandeep Khurana, J P Kenny Inc.

Panelists:

Renard Falcon, Facilities Coordinator,
GOM Deepwater & Exploration Projects, Chevron
William McHolick, Vice President Americas Operations &
Development, BHP Billiton Petroleum
Helge Haldorsen, Head of GOM Business Unit, Hydro Oil and Gas
Joao Figueira, Executive Manager, Petrobras
Cory Weinbel, General Manager of Production Contracts, Caldiva
Sandeep Khurana, Senior Specialist, J P Kenny Inc.

As the balance of risks and costs has declined due to technology advancements and growing experience, the number of companies involved in the deepwater sector has grown rapidly. Owners, many of them focused on an operator role, have different interests based on their portfolio of deepwater fields. Farm-ins, joint ventures (JV), and production sharing contracts (PSC) are very well defined in exploration, leading to equity ownership, but lean on field development, project execution, and construction of the facility along with its future handling. Due to huge investments in developing deepwater fields and infrastructure, creative commercial arrangements such as third-party ownership, production contracts, and transportation fee agreement are being considered. The owners compete and interact to ensure that they get the best leverage from their ownership in the field.

However, what impact does the involvement of a non-operating partner have on field development? Is it healthy or does it cause delays? The panel will debate various issues regarding the alignment of operating and non-operating partners.

Some of the issues discussed will be:

- Differing corporate cultures.
- Vying for operatorship and its arrangements in different regions of the world.
- Influencing execution of field development and optimization for future use.
- Implementing new technology specifically based on experiences in a different part of the world.
- Integrated project team of owners vs. operator-managed project.
- Contrasts between international vs. Gulf of Mexico joint venture operating agreements.

0930 17783

Changing Dynamics in Deepwater Ownership

A. Herman, Chevron; W. McHolick, BHP Billiton Petroleum (Americas) Inc.;
H. Haldorsen, Hydro Gulf of Mexico L.L.C.; J. Figueira, Petrobras;
C. Weinbel, Cal Dive Intl.; S. Khurana, J P Kenny Inc.

Wednesday, 3 May, 0930 to 1200

Room 604

Panel: Alternative Energy Sources

Moderators:

Riley Goldsmith, Goldsmith Engineering Inc.
Cheryl Stark, BP America

Panelists:

Charles Ruigrok, CEO, Syncrude
Fredrick D. Palmer, Senior VP - Gov't Affairs, Peabody Energy
Regis Matzie, Senior Vice President and CTO, Westinghouse
Ahmed Hashmi, Technology VP, BP

It is generally agreed that conventional oil and gas production will peak someday and then decline. Also, there is worldwide concern by many that carbon-based energy sources should be replaced. Predictions of decline rate vary but it is apparent that in the near term of 5 to 10 years, more emphasis will be on gas and coal. Conservation measures will, of necessity, be instigated to mitigate the world energy demand. In the next 2 or 3 decades, oil from tar sands, oil shale, and nuclear power will become the most significant replacements for declining conventional oil and gas production. Methane hydrates, hydropower, solar power, wind power, agricultural crops, and other sources could undoubtedly contribute to future energy demands. However, these appear to be decades away from large-scale production or are likely to be only minor contributors to world demand for energy.

The panel discussion will better define when these sources could replace a significant portion of the present conventional oil and gas production. When would each of these be available in significant additional amounts and how much of the world energy demand could they replace? What are the environmental, political, and economic issues associated with their expanded development? The panelists will provide expert opinion about when and how alternative energy sources will replace decreasing conventional oil and gas production as peak production is past.

Wednesday, 3 May, 0930 to 1200 **Room 602**

Panel: Technology Commercialization – Energy Policy Act 2005

Moderators:

Art Schroeder, Energy Valley Inc.
Laura Atkins, OPEC

Keynote

Oivind Reinertsen, President, Statoil USA

Panelists

James Slutz, Deputy Asst. Secretary, US DoE
Sean Hanrahan, Managing Director, DeepStar
C. Michael Ming, Managing Member, K. Stewart Energy Group
Brian Clark, Schlumberger Fellow, Schlumberger
Dirk McDermott, Managing Director, Altira Group
Michelle Foss, Chief Economist & Director,
Center for Energy Economics, U. of Texas

Over the past six years OTC panels have examined technology commercialization from many different perspectives; international consortiums / organizations, venture and private capital models, industry initiatives, etc. With the signing into law of the Energy Policy Act 2005, sub-part J authorizes funding of a Program Consortium to administer a research, development, demonstration, and commercial application program of technologies for ultra-deepwater and unconventional natural gas and other petroleum resource exploration and production, including addressing the technology challenges for small producers, safe operations, and environmental mitigation.

0930 18411

Technology Commercialization: Energy Policy Act 2005 Authorizes a Public+Private Partnership to Facilitate Research, Development, and Commercialization of Upstream Technologies

A. Schroeder Jr., Energy Valley Inc.

Wednesday, 3 May, 0930 to 1200 **Room 312**

Case Studies from CSEM and Resistivity Methods

Session Chairpersons

Svein Ellingsrud, EMGS
Saad Saleh, Shell Intl. E&P Co.

0930 18378

Remote Reservoir Resistivity Mapping Case Histories

L.J. Srnka, K.E. Green, J.J. Carazzone, M.S. Ephron,
ExxonMobil Upstream Research Co.

0952 18199

Controlled-Source Electromagnetic Imaging in Areas of Complex Geology

L. MacGregor, OHM Ltd.; L. Scott, OHM Inc.

1014 18003

Marine Controlled Source Electromagnetic: The Campos Basin Experience

M.P. Pereira Buonora, Petrobras; R. Reddig, A. Zerilli, AGO Schlumberger

1036 18154

Fast Two-Dimensional Forward and Inversion Algorithms for Interpreting Marine CSEM Data

D. Alumbaugh, A. Abubakar, V. Druskin, T. Habashy, A. Zerilli,
Schlumberger; L. Knihznrman, Center of Geophysical Expedition;
G.M. Hoversten, Lawrence Berkeley Natl. Laboratory

1058 18192

Normal Resistivity Trends for Geopressure Analysis in Mexican Offshore Wells

V. Lopez-Solis, Pemex; D. Velazquez-Cruz, Inst. Mexicano del Petroleo;
A. Jardinez-Tena, Pemex; G. Espinosa-Castaneda,
Inst. Mexicano del Petroleo

1120 18326

Iterative Multiscale Deep-Resistivity Imaging

M.A. Frenkel, Baker Hughes

Wednesday, 3 May, 0930 to 1200

Room 610

LNG 2006

Session Chairpersons:

Jeff Buckles, Chevron Corp.
Shawn Huang, ConocoPhillips

0930 17780

CNG Marine Transport: Demonstration Project Development

G. Stephen, G. Cano, TransCanada CNG Technologies Ltd.

0952 17781

Commercialization of Stranded Gas With a Combined Oil and GTL FPSO

A.C. Van Loenhout, L. Zeelenberg, A. Gerritse,
Bluewater Energy Services B.V.; G. Roth, E. Sheehan, N. Jannasch,
Syntroleum Corp.

1014 18012

Offshore LNG: The Perfect Starting Point for the 2-Phase Expander?

M. Barclay, Foster Wheeler Ltd.; C. Yang,
Foster Wheeler North America Corp.

1036 17931

What Risk Should the Public Accept From LNG Facilities?

E. Meyer, G. Andreassen, S. Shaw, C. Wei, Det Norske Veritas

1058 18026

Offshore LNG Transfer: A Worldwide Review of Offloading Availability

L. Poldervaart, H. Oomen, J. Ellis, SBM Production Contractors

1120 18092

Integration of Insulated Rigid and Flexible Cryogenic Pipes in Marine LNG Transfer Systems

P.J. Cox, Technip; C. Blair, Aspen Aerogels Inc. D. Adkins, Chevron

1142 18306

A Chain-Leg Installation System To Improve Safety During Installation of the World's First Offshore LNG Terminal

L.A. Wilson, G.P. Mann, G. Hamilton, Acergy

Wednesday, 3 May, 0930 to 1200

Room 606

Hydrates as an Energy Source I

Session Chairpersons

Robin Buchannon, U. of Mississippi
Bill Siapno, Consultant

0930 18204

Overview of Observatory Development and the Site Selection Process

T.M. McGee, L. Macelloni, U. of Mississippi

0952 18132

The Mississippi Canyon 118 Gas-Hydrate Site: A Complex Natural System

R. Sassen, GERG Texas A&M U.; H.H. Roberts, Louisiana State U.; W. Jung, GERG Texas A&M U.; C.B. Lutken, U. of Mississippi; D.A. DeFreitas, S.T. Sweet, N.L. Guinasso Jr., GERG Texas A&M U.

1014 18113

Bathymetric Mapping and High-Resolution Seismic Profiling by AUV in MC118

K. Sleeper, U. of Mississippi; A. Lowrie, Consultant; A. Bosman, U. of Rome; L. Macelloni, C.T. Swann, U. of Mississippi

1036 18208

Analyses of Core Samples From Mississippi Canyon 118

C.B. Lutken, U. of Mississippi; C.A. Brunner, U. of Southern Mississippi; L. Lapham, U. of North Carolina at Chapel Hill; J. Chanton, Florida State U.; R. Rogers, Mississippi State U.; R. Sassen, Texas A&M U.; J. Dearman, L. Lynch, Mississippi State U.; J. Kuykendall, U. of Southern Mississippi; A. Lowrie, Consultant

1058 17804

Seafloor Observatory in the Gulf of Mexico: Tracing the Carbon Flow Environments

C. Zhang, J. Noakes, U. of Georgia

1120 18170

Pore Fluid Array Construction and Deployment at Mississippi Canyon Site 118, Gulf of Mexico

L.L. Lapham, U. of North Carolina; J.P. Chanton, Florida State U.; C.S. Martens, U. of North Carolina; P.D. Higley, Specialty Devices Inc.; H.W. Jannasch, Monterey Bay Aquarium Research Inst.; J. Woolsey, U. of Mississippi

1142 17962

Storage and Distribution of Digital Data From the Gulf of Mexico Seafloor Observatory

P.E. Murray, U. of Texas at Austin; C. Zala, M. Dunham-Wilkie, Barrodale Computing Services Ltd.

Wednesday, 3 May, 0930 to 1200

Room 600

Exploration and Marine Geoscience**Session Chairpersons**

Kelley Peace, Fugro Geoservices Inc.
John Brand, Geoscience Earth & Marine Service

0930 18083

Quantifying the Impact of Deepwater Geohazards

M. Galavazi, Fugro Offshore Geotechnics; R. Moore, Halcrow Group Ltd.; M. Lee, Consultant; D. Brunsen, Halcrow Group Ltd.; B. Austin, Brynterpretation

0952 18255

Geophysical and Geotechnical Definition and Characterization of Mass-Erosion Sediments for a Geohazard Risk Assessment in the West Nile Delta

A.J. Digby, Fugro

1014 18064

Correlations Between Well Logs and Geotechnical Properties

S. Lafuerza, M. Canals, U. de Barcelona; M. Galavazi, Fugro Engineers B.V.

1036 18117

Scientific Drilling and Coring in Lake Malawi, Africa

M. Paulson, K. Moran, U. of Rhode Island; M. Lengkeek, P. Jeffery, Lengkeek Vessel Engineering Inc.; A. Frazer, Seacore Ltd.; C. Scholz, Syracuse U.

1058 18201

Advances in Fluid Sampling With Formation Testers for Offshore Exploration

C. Del Campo, C. Dong, R. Vasques, P. Hegeman, T. Yamate, Schlumberger

1120 18037

Multiple Advanced Logging-While-Drilling Technologies Optimized for Drilling and Well Placement

T. Gravem, A.K. Thorsen, T.B. Helgesen, INTEQ; G. Waldron, Hydro; J.C. Lofts, INTEQ

1142 17790

Sand Control Application in Mediterranean Sea Pliocene Gas Reservoirs: Cast Study

H. Bahaa, E. Ragae, Ministry of Petroleum, Egypt

Wednesday, 3 May, 1400 to 1630

Room 306

General Session II – Stranded Gas to Commercial Reality**Moderator**

James Hale, President
Explorer Energy Services Ltd.

Panelist

Bent Svensson, Program Manager, World Bank
Steven Campbell, President and Founder, Trans Ocean Gas Inc.
Xavier Pr eel, Vice President, Business Strategy
Total Exploration and Production
Rodney Cook, Business Unit Manager Middle East & Africa
Noble Energy, Inc.

The World Bank has a Global Gas Flaring Reduction Initiative which has been supported by a number of countries. Global oil production capacity is forecast to increase 60 percent over the next 20 years, and a similar trend is expected for associated gas production. Much of the incremental oil production will come from countries and regions that currently have large flaring problems. According to the EIA/DOE's International Energy Outlook 2005, the Global demand for natural gas is projected to increase nearly 70 percent over the next 20 years where as oil is expected to grow roughly 40 percent over the same period. A significant portion of the natural gas that is flared comes from countries that are located far from the major markets centers of the US and Europe such as Africa and South East Asia.

To develop the natural gas in these remote areas, constraints will need to be removed. New regulations and improvement in institutional capacity for host countries will need to be developed that provide appropriate investment signals for developing both the internal domestic market and export markets. Typically, a large "anchor" project (usually a power plant) is required to develop new natural gas markets. This may require reforms in the electricity sector, particularly with respect to pricing to expand the local demand for natural gas.

Natural gas has historically been transported by pipelines and more recently by LNG tankers for export markets. In remote areas with smaller reserves, stranded natural gas will require other solutions such as CNG, or conversion to methanol or liquids by GTL processing to become viable.

The general session panel is comprised of individuals that will share their experience in dealing with the issue of stranded gas and offer suggestions on a path forward.

Wednesday, 3 May, 1400 to 1630

Room 604

Kizomba: Design One, Build Multiples

Session Chairpersons

Subir Bhattacharjee, ExxonMobil Upstream Research Co.
Roald Lokken, ExxonMobil Development Co.

1400 17915

Kizomba A and B: Project Overview

B.D. Boles, G.E. Mayhall, ExxonMobil Development Co.

1422 17918

Leveraging Lessons Learned Across Multiple Deepwater Projects

L.B. Waters, P.P. Smith, C.A. Prescott, ExxonMobil Development Co.

1444 17919

Development of Close-Moored Deepwater Systems: Kizomba A and B Projects

R.E. Sandstrom, J. Huang, M.A. Danaczko, ExxonMobil Upstream Research Co.; W.C. Kan, R.K. Fry, ExxonMobil Development Co.

1506 17955

Drilling and Completion Innovations Deliver World-Class Results in Angola

C.J. Williams, S.S. Wilson, ExxonMobil Development Co.

1528 17941

Kizomba A and B: Installation Overview

J.B. Bates, G.O. Gernon, PMP; M.D. Gillette, ExxonMobil Development Co.

1550 17939

Development of the Kwanda Base Deepwater Logistics Shorebase

B. Rajoo, Esso Exploration Angola Ltd.

1612 17917

Utilization of Safety Partnerships To Achieve World-Class Safety Performance on the Kizomba A and B Projects

J.J. Toellner, M.G. Smith, K.K. Fortune, ExxonMobil Development Co.

Wednesday, 3 May, 1400 to 1630

Room 602

Subsea Construction, Repair, Commissioning, and Operation

Session Chairpersons

David Theiss, Cameron
Sanjay Sinha, Chevron Corp.

1400 18312

Free-Span Remediation Studies for the K2 Pipe-In-Pipe Flowlines

U. Eigbe, M. Fletcher, M. Hensley, D. Ling, C. Routh, INTEC Engineering

1422 18362

Planning, Procedures, and Results of a Deepwater Vertical SCR VIV Suppression Retrofit Project

S.P. Armstrong, Shell Global Solutions (US) Inc.

1444 18021

Addressing the Integration and Installation HSE Risks for Deepwater Projects

A. R. Warwick, M.M. Grant, Atkins

Wednesday, 3 May, 1400 to 1630

Room 312

Technical Highlights of the Integrated Ocean Drilling Program

Session Chairpersons

Kelly Kryc, IODP-MI
Gregory Myers, Columbia U.

1400 18011

Scientific Ocean Drilling: Characterizing and Sampling Methane Hydrates

F. Rack, Joint Oceanographic Institutions; P. Schultheiss, Geotek Ltd.; D. Goldberg, LDEO, Columbia U.; M. Storms, D. Schroeder, B. Julson, M. Malone, IODP, Texas A&M U.; T. Collett, U.S. Geological Survey; M. Riedel, Geological Survey of Canada; P. Long, Pacific Northwest National Lab.

1422 18114

The Arctic Coring Expedition: Drilling at the Top of the World

K. Moran, U. of Rhode Island; J. Backman, Stockholm U.; J.W. Farrell, U. of Rhode Island

1444 17920

Coring Dynamics: Data Acquisition While Coring

G. Myers, LDEO, Columbia U.; D. Schroeder, Texas A&M U.; W. Keogh, LDEO, Columbia U.; K. Grigar, Texas A&M U.; W. Masterson, LDEO, Columbia U.

1506 17957

Measuring Temperature and Pressure With Temperature Two Pressure Probe in the Ursa Basin, Gulf of Mexico: Development of a New Pressure and Temperature Probe for the IODP

P.B. Flemings, Pennsylvania State U.; J.T. Germaine, MIT; H. Long, Pennsylvania State U.; B. Dugan, Rice U.; D. Sawyer, Pennsylvania State U.; J.H. Behrmann, Albert-Ludwigs U. Freiberg; C. John, Texas A&M U.; Shipboard Scientific Party, IODP Expedition 308

1528 17916

Comparison of Heave Motion Compensation Systems on Scientific Ocean Drilling Ship and Their Effects on Wireline Logging Data

G. Sarker, G. Myers, T. Williams, D. Goldberg, Borehole Research Group, LDEO, Columbia U.

1550 18119

Prediction of Sediment Undrained Shear Strength From Geophysical Logs Using Neural Networks

M. Paulson, U. of Rhode Island; J. Ressler, GZA GeoEnvironmental Inc.; K. Moran, C. Baxter, U. of Rhode Island

1612 18014

ODP/IODP "CORK" Long-Term Subseafloor Hydrogeological Observatories

K. Becker, U. of Miami; E.E. Davis, Geological Survey of Canada; A.T. Fisher, U. of California, Santa Cruz; A. Klaus, D. Schroeder, M. Storms, IODP, Texas A&M U.; T. Pettigrew, Mohr Engineering; C.G. Wheat, U. of Alaska

Wednesday, 3 May, 1400 to 1630 **Room 610**

Deepwater Steel Catenary Risers

Session Chairpersons

Carlos Moreira, Petrobras
Ruxin Song, Technip Offshore Inc.

1400 18180
Wave-Loading Fatigue Performance of Steel Catenary Risers in Ultradeepwater Applications

J. Xu, A.S. Jesudasan, J. Fang, INTEC Engineering; M. Else, MMS

1422 18276
The Effectiveness of Helical Strakes in the Suppression of High-Mode-Number VIV

J.K. Vandiver, S.B. Swithenbank, V. Jaiswal, MIT; H. Marcollo, AMOG Consulting

1444 17912
Safety Factors for Ultradeepwater SCR Handover Operations

A.S. Jesudasan, P. Olden, K.C. Dyson, P. Olden, J. Hoose, INTEC Engineering Inc.

1506 17898
Automatic Ultrasonic Inspection of Steel Catenary Riser With a Corrosive-Resistant Alloy Layer

J. van der Ent, RTD; J. van Nisselroij; Shell Global Solutions Intl.; F. Kopp, Shell Intl. E&P; A. Otter, Sarawak Shell Bhd; N. Weli, Shell Nigeria EP Co.; S. Judd, Acergy

1528 18313
Post-Extreme-Event Assessment of SCR Integrity: Strength and Fatigue Effects on the Matterhorn Gas Export SCR From Hurricane Ivan

G. Harte, W.K. Kavanagh, MCS; D. Taberner, C. Van Der Linden, Total E&P U.S.A.

1550 18348
Application of CFD for Vortex-Induced Vibration Analysis of Marine Risers in Projects

M. Dixon, D. Charlesworth, DeepSea Engineering & Management

Wednesday, 3 May, 1400 to 1630 **Room 606**

Hydrates as an Energy Source II

Session Chairpersons

Robin Buchannon, U. of Mississippi
Charles Morgan, U. of Hawaii

1400 18247
New Technology Needs for Methane Hydrates Production

R.J. Todd, D.M. Hannegan, S. Harrall, Weatherford Intl. Ltd.

1422 18246
New Deposit Accumulation Model for Marine Gas Hydrates

R.L. Kleinberg, Schlumberger

1444 18087
Environmentally Friendly CO₂ Storage in Hydrate Reservoirs Benefits From Associated Spontaneous Methane Production

A. Graue, B. Kvamme, U. of Bergen; B.A. Baldwin, Green Country Petrophysics LLC; J. Stevens, J. Howard, ConocoPhillips; E. Aspenes, G. Ermland, J. Husebo, U. of Bergen; D.R. Zornes, ConocoPhillips

1506 17929
Detailed Imaging of Deepwater Hydrate Geology With Horizontal Arrays of Seafloor Sensors

B.A. Hardage, P.E. Murray, U. of Texas at Austin

1528 18193
Response of Oceanic Hydrate-Bearing Sediments to Thermal Stresses

G.J. Moridis, M.B. Kowalsky, Lawrence Berkeley Natl. Laboratory

1550 17860
The Problem of Inert Gas Venting on FPSOs and a Straightforward Solution

D. de Vos, M. Duddy, Single Buoy Moorings Inc.; J. Bronneburg, Gusto MSC

Wednesday, 3 May, 1400 to 1630 **Room 600**

Invited Organization: The Energy Institute—New From Old: Breathing New Life into Depleted Reservoirs and Their Associated Infrastructure

Session Chairpersons

Tom Kelly, FMC Energy Systems
Lawrence Slade, The Energy Institute

1400 18403
CHARMS: A Contactless Chain and Riser Monitoring System

K. Swinden, The Energy Institute

1422 18405
Challenges of Long Satellite Tiebacks

I.G. Ball, Subsea Domain Ltd.

1444 18407
New Developments in Floating Production Systems

J.A. Lane, R. Hawn, Chevron

1506 18408
New Technology From Concept to Delivery

D. Ellix, The Industry Technology Facilitator

1528
De-risking: The Key To Developing Stranded Reserves

J. Goodale, Challenger Minerals (North Sea) Limited

1550
Novel Chemical Applications for Enhancing Production From Mature Assets

B. Lambert, Clairant Corp.

Technical Program: Thursday, 4 May

Thursday, 4 May, 0930 to 1200 Room 306

Panel: Energy Leadership and Outlook

Moderators:

Art Schroeder, Energy Valley Inc.
Melanie Kenderdine, GTI

Keynote

Mohammed S. Barkindo; Acting Secretary General, OPEC

Panelists

Pete Miller, CEO, National Oilwell Varco
Fran Heartwell, Vice President, Kerr McGee
Mark Jackson, President and COO, Noble Corp.
Steve Holditch, Department Chair, Texas. A&M

Leadership; inspiring others to do the right things for the right reasons and collectively achieving greatness! We recognize it in certain elected officials, within our religious institutions, and within our own family units. In businesses without strong leadership, financial success is hardly obtainable much less sustainable. What constitutes leadership within the energy sector? What qualities and attributes will be required of the leaders of tomorrow? This panel includes a diverse cross section of our industry's leaders discussing the challenges and the strategies necessary to create a sustainable future.

0930 18412

Energy Leadership and Outlook

A. Schroeder Jr., Energy Valley Inc.

Thursday, 4 May, 0930 to 1200 Room 604

K2 Project: A Deepwater Case Study

Session Chairpersons:

Mike Prichard, Manatee Inc.
Charlie Burton, Chevron Corp.

0930 18298

The K2 Project: A Drilling Engineer's Perspective

J. Sanford, J. Woomey, J. Miller, C. Russell, Eni Petroleum

0952 18302

K2 Subsea Trees and Controls: 15K, 5" Bore, 70 Tons: The Challenges

A.A. Bradley, Vetco Gray Inc.; A.R. Brimmer, Eni Petroleum; R. Pettus, Anadarko Petroleum Corp.

1014 18304

K2 Flowline and Risers: From Design to Precommissioning

B. Campbell, Manatee Inc.; J. Jewett, N. Gunnion, Technip USA; C. Burton, Chevron Corp.

1036 18311

K2 Topsides Facilities: Design Challenges

F. Colbert, OFD Engineering LLC; B. Allen Jr., Anadarko Petroleum Corp.

1058 18308

Deepwater Chemical-Injection Systems: The Balance Between Conservatism and Flexibility

A.R. Brimmer, Eni Petroleum.

1120 18249

Capital Value Process for Turnarounds

W.T. Straker, BP America Inc.

Thursday, 4 May, 0930 to 1200 Room 602

Albacora Leste Field Development

Session Chairpersons:

Jacques Salies, Petrobras America Inc.
Robert Saucedo, Strathford Lane Capital

0930 17925

Albacora Leste Field Development Project

R.O. Loureiro, B. Barbosa, C. Benicio, Petrobras; N. Bolatti, REPSOLYPF

0952 18056

Albacora Leste Field Development: Reservoir Aspects and Development Strategy

W.P. Lemos, M.B. de Castro, C.M. Soares, J.F. Rosalba, A.G. Meira, Petrobras

1014 17971

Albacora Leste Deepwater Field: Improvements on Wells Construction

E. de Melo Sanches, E. dos Santos. Radespiel, E.F. Nogueira, L.F. de Oliveira, M. Gomes, Petrobras

1036 18044

Albacora Leste Field: Subsea Production System Development

C.E. Longo, S.J. Neto, M.T. de Paula, Petrobras; F. Lopes Jr., Technip; C.A. Godinho, Prysmian

1058 18242

Albacora Leste Field Development; FPSO P-50 Systems and Facilities

F.N. Brandao, C.C. Henriques, L.B. Rende, L.R. de Barcellos, C.B. de Oliveira, Petrobras

1120 18243

Albacora Leste Field Development: FPSO P-50 Mooring System Concept and Installation

F.N. Brandao, C.C. Henriques, J.B. de Araujo, O.G. Ferreira, C.D. Amaral, Petrobras

1142 18118

Integrated Approach for Big Offshore Production Facility Construction Projects

R.A. da Silva, J.V. de Castro Galarza, J.E. Loureiro, Petrobras; J. Vinhoti Martins, Accenture

Thursday, 4 May, 0930 to 1200 Room 312

Subsea Processing and Boosting

Session Chairpersons:

Tom Chen, Shell Intl. E&P Inc.
Janardhan Davalath, FMC Technologies Inc.

Keynote

0930 18261

Subsea Processing and Boosting: Technical Challenges and Opportunities

R.M. Bass, Shell Intl. E&P

0952 17899

Subsea Boosting of the Brenda Field Through Utilization of the Multipurpose Field Development Solution

J. Elde, Framo Engineering; M. Coulthard, P. Voor De Poorte, Oiltexco

1014 18198

Application of Subsea Processing and Boosting at Campos Basin

M.W. Figueiredo, C. Kuchpil, E.F. Caetano, Petrobras

1036 17981

Technology Qualification for the Tordis Subsea Separation, Boosting, and Injection System

R. Fantoft, FMC Technologies; T. Hendriks, CDS Engineering; J. Elde, Framo Engineering

1058 17984

Status and New Developments in Subsea Processing

O.T. McClimans, R. Fantoft, FMC Technologies

1120 17809

The Long-Term Performance of Sand-Control Completions in the Mokoko-Abana Field, Cameroon

D. Mason, Shell Intl. E&P; M. Evans, B. Ekamba, Pecten Cameroon Co.; C. Jones, J. Cameron, Weatherford Intl.

Thursday, 4 May, 0930 to 1200

Room 610

Structural Integrity Management of Fixed and Floating Structures**Session Chairpersons**Chris Serratella, American Bureau of Shipping
Doug Angevine, ExxonMobil

0930 18364

A Flexible Approach to Risk-Based Inspection of FPSOs

A.K. Lee, C Serratella, G. Wang, R. Basu, ABS; R. Spong, Energo Engineering Inc.

0952 18146

Experience Gained From Floating Units Integrity Management

B. Lanquetin, Total S.A.

1014 18332

The Development of a Recommended Practice for Structural-Integrity Management for Fixed Offshore Platforms

F. Puskar, Energo Engineering Inc.; H.S. Westlake, MSL; P.E. O'Connor, BP; J.R. Bucknell, MSL

1036 18142

Specific Tools and Services for Integrity of F(P)SOs: Case Studies for Girassol FPSO and a Concrete Unit

M.F. Renard, P. Biasotto, Bureau Veritas; B. Lanquetin, Total S.A.

1058 18333

Offshore Structures: Adequate Margins

D.J. Wisch, Chevron Corp.

1120 18145

Methodology, Tools, and Services for Integrity of TLPs: Case Study for the Matterhorn TLP

H. Johansen, G. Ripley, T. Torvbraten, Det Norske Veritas; B. Lanquetin, Total S.A.

1142 18331

The Role of Ultimate Strength Assessments in Structural Integrity Management of Offshore Structures

H. Westlake, MSL; F.J. Puskar, Energo Engineering Inc.; P. O'Connor, BP; J.R. Bucknell, MSL

Thursday, 4 May, 0930 to 1200

Room 606

Developments in Jackup Technology**Session Chairpersons:**Patrick Wong, ExxonMobil Development Co.
Pharr Smith, GlobalSantaFe Corp.

0930 18028

Site Assessment for Jackups in the Gulf of Mexico

D.R. Lewis, Lewis Engineering Group; J. Brekke, GlobalSantaFe Corp.

0952 17879

Metocean Criteria for Jackups in the Gulf of Mexico

J.J. Stiff, ABS Consulting; R. R. Roper, ENSCO Intl.; V.J. Cardone, A. Cox, Oceanweather Inc.; D.R. Lewis, Lewis Engineering Group.

1014 18266

3D Nonlinear Wave Spreading on Jackup Loading and Response and Its Impact on Current Assessment Practice

S.F. Smith, M. Hoyle, R.V. Ahilan, Noble Denton Consultants Ltd.; R.J. Hunt, Shell U.K. Ltd.; M.R. Marcom, Rowan Companies Inc.

1036 17770

Cavity Stability and Bearing Capacity of Spudcan Foundations on Clay

M.S. Hossain, M.F. Randolph, U. of Western Australia; Y. Hu, Curtin U. of Technology; D.J. White, U. of Cambridge

1058 18367

Jackup Foundation Performance in Clay

J.S. Templeton, Sage USA. Inc.

1120 18268

Installing Jackups in Punch-Through-Sensitive Foundations

R. Brennan, ConocoPhillips; R.W. Stonor, M.J. Hoyle, Noble Denton Consultants Ltd.; C.P. Cheng, Formerly of Noble Consulting Ltd.; D. Martin, R. Roper, ENSCO Intl. Inc.

1142 18016

Potential Benefits of Using Skirted Foundation for Jackup Platforms

H.P. Jostad, K.H. Andersen, Norwegian Geotechnical Inst.

Thursday, 4 May, 0930 to 1200

Room 600

Process Technology**Session Chairpersons**Jack Smart, John Smart Consulting Engineers
Tom Rodkey, GDS Engineers

0930 18010

Advances in Glycol Reclamation Technology

C.A. Nazzari, Primes Services Ltd.; J. Keogh, Petreco Intl., Division of Cooper Cameron Corp.

0952 17771

New Method for Extraction of Water and Water From Natural Gas

M.D. Max, S.R. Tatro, J.P. Osegovic, L.A. Brazel, K.M. Sheps, Marine Desalination Systems

1014 17884

Supersonic Gas Conditioning for NGL Recovery

P. Schinkelshoek, H. Epsom, Twister BV

1036 18278

Novel Coalescer Technology in First-Stage Separator Enables One-Stage Separation and Heavy-Oil Separation

T.A. Fjeldly, E.B. Hansen, P.J. Nilsen, Vetco Aibel

1058 18140

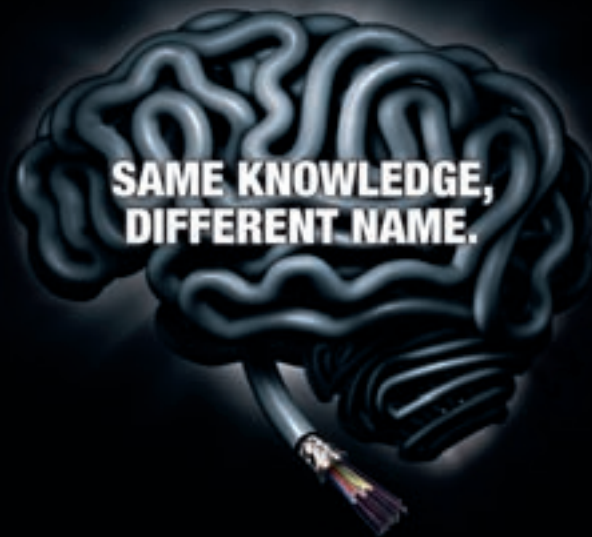
Fiber-Optic Real-Time Distributed-Temperature Sensing Provides Improved Management for Heavy Oil Production Environment

J.J. Goiffon, D. Gualtieri, Halliburton Energy Services Inc.

1120 17751

Removing Oil and Grease From Produced Water Using Microbubble Flotation Technique: From Theory to Field Practice

A. Hayatdavoudi, U. of Louisiana at Lafayette



**SAME KNOWLEDGE,
DIFFERENT NAME.**

Same innovation, same performance, same know-how.
Pirelli Cables & Systems is now Prysmian Cables & Systems.



www.prysmian.com

BOOTH 4117

**Dive into
Prysmian cables**