# TABLE OF CONTENTS

**Volume 1**

<table>
<thead>
<tr>
<th>Conference Paper</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IADC/SPE 149696</td>
<td>Rotary Steerable Tool Damage Prevention by Utilization of an Asymmetric Vibration Damping Tool</td>
</tr>
<tr>
<td>IADC/SPE 149755</td>
<td>Can You Protect Your Motor Without Sacrificing Performance?</td>
</tr>
<tr>
<td>IADC/SPE 149778</td>
<td>Nikaitchou ERD: Designing for Success on the North Slope of Alaska</td>
</tr>
<tr>
<td>IADC/SPE 149898</td>
<td>Sophisticated Software Analysis System and Use of Torque/Drag Modeling for Complex Well Operations Increases Operational Efficiency</td>
</tr>
<tr>
<td>IADC/SPE 149906</td>
<td>Advanced PreDrill Simulations for Safer and More Cost-effective Drilling</td>
</tr>
<tr>
<td>IADC/SPE 150047</td>
<td>Successful Qualification and Deployment of a High-Pressure Drill Pipe Riser in West Africa</td>
</tr>
<tr>
<td>IADC/SPE 150030</td>
<td>New HT/HP Technology for Geothermal Application Significantly Increases On-Boost at the Edge of the ERD Envelope, Sakhalin Island, Russia</td>
</tr>
<tr>
<td>IADC/SPE 150027</td>
<td>New Tools and Procedures Increase Reliability of Openhole Sidetracking Operations</td>
</tr>
<tr>
<td>IADC/SPE 150107</td>
<td>Successful Application of Geomagnetic Referencing for Accurate Wellbore Positioning in a Deepwater Project Offshore Brazil</td>
</tr>
<tr>
<td>IADC/SPE 150232</td>
<td>Exploration to Production in 2 Years: A Contracting Strategy Case Study</td>
</tr>
<tr>
<td>IADC/SPE 150347</td>
<td>Milling Low-Side Casing Exit Windows in Horizontal Wells: A Case Study</td>
</tr>
<tr>
<td>IADC/SPE 150461</td>
<td>Modeling for MPD Operations with Experimental Validation</td>
</tr>
<tr>
<td>IADC/SPE 150513</td>
<td>Buckling of Tubing Inside Casing</td>
</tr>
<tr>
<td>IADC/SPE 150664</td>
<td>Improving Drilling Performance in the Upper Cretaceous: A Case Study From Santos Basin, Brazil</td>
</tr>
<tr>
<td>IADC/SPE 150931</td>
<td>Multiple Criteria Casing Seat Selection Method</td>
</tr>
<tr>
<td>IADC/SPE 150941</td>
<td>Advanced Drilling Simulation Environment for Testing New Drilling Automation Techniques</td>
</tr>
<tr>
<td>IADC/SPE 150995</td>
<td>Successful Optimization Strategies Combine to Deliver Significant Performance Boost at the Edge of the ERD Envelope, Sakhalin Island, Russia</td>
</tr>
<tr>
<td>IADC/SPE 150971</td>
<td>Results of Jan. 25, 2011 IADC Shale Drilling Technology &amp; Challenges Workshop</td>
</tr>
<tr>
<td>IADC/SPE 150973</td>
<td>Building an Automated Drilling System Where Surface Machines are Controlled by Downhole and Surface Data to Optimize the Well Construction Process</td>
</tr>
</tbody>
</table>

**Authors**

- Timm Burnett, Benjamin Feauto, Ian Forster, Alan Kabbara
- Blair Guidroz, Steve Barton
- Mishal Abahusayn, Brandon Foster, Jason Brink, Marc Kuck, Joseph Longo
- Liangjun Xie, David Moran, Lei Yan, Jose Mercado
- Dan Sai, Thor O. Galsrud, Espen Kristoffersen
- Charles Dewey, Shantanu Swadi, John Campbell, Praful Desai
- Simone Orazzini, Regillo Kasirin, Giampaolo Ferrari, Alessandro Bertini, Isabella Bizzocchi, Robert Ford, Qingshu Li, Ming Zhang
- Mathieu Camus, Pascal Auclair, Barrie Horsburgh, Yann Gallois, Christophe Rohart, Henri Williams, Yannick Mjoaolu
- Benny Poedjono, Diana Montenegro, Pete Clark, Shola Okevwanmi, Stefan Mauss, Xiong Li
- Cliff Hogg, Ron Barker, Juan Carlos Valverde Penangos, Rodrigo Caceres Leon, Carlos Alberto Gandara, Everardo Ortiz Prada, Paola Adriana Gil Chipatecuca, Henry Rueda
- Ingar Skyberg Landet, Hessam Mahdianfar, Ulf Jakob F. Aarsnes, Alexey Pavlov, Ole Morten Aamo
- Robert F. Mitchell
- S. Flores, L. Fagundes, Y. Irokawa, A. Schmidt, H. Quinones, G. Landinez, P. C. De Oliveira, A. Ramos, Y. Medina
- Bernt S. Aadnoy, Eirik Kaarstad, Mesfin Belayneh
- Eric Cayeux, Benoit Daireaux, Erik Wolden Dvergsnes, Amare Leulseged, Bjornor Torstein Bruaun, Mike Herbert
- Tony Pink, Andrew Bruce, Hege Kverneland, Brad Applewhite

**Table of Contents**

- **Volume 1**
  - IADC/SPE 149696: Rotary Steerable Tool Damage Prevention by Utilization of an Asymmetric Vibration Damping Tool
  - IADC/SPE 149755: Can You Protect Your Motor Without Sacrificing Performance?
  - IADC/SPE 149778: Nikaitchou ERD: Designing for Success on the North Slope of Alaska
  - IADC/SPE 149898: Sophisticated Software Analysis System and Use of Torque/Drag Modeling for Complex Well Operations Increases Operational Efficiency
  - IADC/SPE 149906: Advanced PreDrill Simulations for Safer and More Cost-effective Drilling
  - IADC/SPE 150047: Successful Qualification and Deployment of a High-Pressure Drill Pipe Riser in West Africa
  - IADC/SPE 150030: New HT/HP Technology for Geothermal Application Significantly Increases On-Boost at the Edge of the ERD Envelope, Sakhalin Island, Russia
  - IADC/SPE 150107: Successful Application of Geomagnetic Referencing for Accurate Wellbore Positioning in a Deepwater Project Offshore Brazil
  - IADC/SPE 150232: Exploration to Production in 2 Years: A Contracting Strategy Case Study
  - IADC/SPE 150347: Milling Low-Side Casing Exit Windows in Horizontal Wells: A Case Study
  - IADC/SPE 150461: Modeling for MPD Operations with Experimental Validation
  - IADC/SPE 150513: Buckling of Tubing Inside Casing
  - IADC/SPE 150664: Improving Drilling Performance in the Upper Cretaceous: A Case Study From Santos Basin, Brazil
  - IADC/SPE 150931: Multiple Criteria Casing Seat Selection Method
  - IADC/SPE 150941: Advanced Drilling Simulation Environment for Testing New Drilling Automation Techniques
  - IADC/SPE 150995: Successful Optimization Strategies Combine to Deliver Significant Performance Boost at the Edge of the ERD Envelope, Sakhalin Island, Russia
  - IADC/SPE 150971: Results of Jan. 25, 2011 IADC Shale Drilling Technology & Challenges Workshop
  - IADC/SPE 150973: Building an Automated Drilling System Where Surface Machines are Controlled by Downhole and Surface Data to Optimize the Well Construction Process
IADC/SPE 151186 Upgrading the Real-Time Drilling Optimization Culture in Brazil’s Challenging Deepwater Operations: The Utilization of a Remote and Rigsite Multidisciplinary Collaborative Concept .......................................................... 527
Augusto Borella Hougaz, Damilo S. Gozzi, Isao Fujishima, Klaus L. Vello, Sandro Alves, Ian Thomson, Raul Krasuk, Frank Buzerio

IADC/SPE 151190 Case Study on Bottom Hole Assembly Tool .......................................................... 536
Richard Verhoef

IADC/SPE 151193 Near Field Developments with an Upgraded Brown-Field Platform Rig: Sharing the learning from a Three-Well Extended Reach Drilling (ERD) Program .......................................................... 544
Miguel O. Mota, Gregory W. King, William D. O’Donnell, Kerr Hewit, Paul A. Dumont

IADC/SPE 151198 Establishing an Industry Best Practice on Subsea Wellhead Fatigue Assessment .......................................................... 557

IADC/SPE 151202 Regeneration of First-Generation Subsea Fields: The Challenges of New Wells in Old Infrastructure .......................................................... 573
Sean Stright, Vikas Srivastava, Gregory King, David W. Smith, Nelson Tears

IADC/SPE 151204 Collaborating on Real-Time Geomechanics across Organizational Boundaries .......................................................... 584
L. Magini, D. Molteni, F. Zausa, N. Fardin, W. Pasin

IADC/SPE 151221 Converting Static Friction to Kinetic Friction to Drill Further and Faster in Directional Holes .......................................................... 591
Lane P. Skyles, Yosef A. Amiravastani, James E. Wilhoit

IADC/SPE 151227 Size Degradation of Granular Lost Circulation Materials .......................................................... 607
Paul D. Scott, David H. Beadmore, Zack D. Wade, Eddie Evans, Krista D. Franks

IADC/SPE 151231 Integrated Drilling, Completion, and Stimulation Approach Facilitates High-Productivity Horizontal Well with 10,000-ft Pay Interval .......................................................... 616
John Jorden, Alfred Jackson, Mohamed Abdulla Al Marzaq, Stu Keller, Chris Shuchart, Catalin Ivan, Mike Phi

IADC/SPE 151241 Interventionless Surveillance in a Multi-lateral Horizontal Well .......................................................... 626
Christian Andresen, Brock Williams, Mike Morgan, Theresa Williams, Tim Crumrine, Andy Bond, James Franks

IADC/SPE 151248 Directional Drilling Tests in Concrete Blocks Yield Precise Measurements of Borehole Position and Quality .......................................................... 635
Ed Stockhausen, Ross Lowdon, Bill Lesso

IADC/SPE 151249 Continuous Circulation Drill String Sub .......................................................... 649
J. Weir, R. Goodwin, R. Macmillan

IADC/SPE 151253 Comprehensive Review of Damages and Repairs on Drill Pipe Connections .......................................................... 653
Thomas M. Redlinger, P. Steven Griggs, Albert Odell, Stein Bergo

IADC/SPE 151254 Analytical Model to Predict the Effect of Pipe Friction on Downhole Temperatures for Extended-Reach Drilling (ERD) .......................................................... 673
Aniket Kumar, Aijay Pratap Singh, Robello Samuel

IADC/SPE 151257 Automation in Drilling: Future Evolution and Lessons from Aviation .......................................................... 684
J. L. Thorogood

IADC/SPE 151274 Scaled Tortuosity Index: Quantification of Borehole Undulations in Terms of Hole Curvature, Clearance and Pipe Stiffness .......................................................... 696
S. Brands, R. Lowdon

Volume 2

IADC/SPE 151283 PDC Bit Steerability Modeling and Testing for Push-the-bit and Point-the-bit RSS .......................................................... 706
S. Menand, C. Simon, J. Gaombalet, L. Macrey, L. Gerbaud, M. Ben Hamida, L. Amghar, H. Danoix, B. Cuiller, H. Sinardelet

IADC/SPE 151322 Qualification of a 4.75 in. Rotary Steerable System For Complex 3D and High Build-Up-Rate Applications In Through Tubing Drilling (TTD) Operations .......................................................... 718
Morten Eidem, Stein Andersen, Knut Winterstone, Sascha Schwarte, Carl Clemensen, Anders Nesheim

IADC/SPE 151331 A New, Alternative Weighting Material for Drilling Fluids .......................................................... 734
Mohamed Al-Bagoury, Chris Steele

IADC/SPE 151334 Integrated Pressure Management Processes for Reducing the Risk Associated with Well Instability Issues: Implications for HPHT Wells .......................................................... 744
Jorunn Haver Figenschou, Arve K. Thorsen, Bruce Thistle, Urban Williams

IADC/SPE 151337 Development of a New Advanced Multiple Activation System for Concentric Underreamers .......................................................... 756
Bjorn Tore Torseid, Tom Ray, Jianbing Hu, Ole Jacob Gjertsen, Michael Muir

IADC/SPE 151338 Is There a Place for High Reliability Organisations in Drilling? .......................................................... 762
J. L. Thorogood