### TABLE OF CONTENTS

**Volume 1 of 2**

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Challenges and Achievements of Drilling Maximum-Reservoir-Contact (MRC) Wells in Shaybah Field</td>
<td>A.S. Dossary, Saudi Aramco, and A.A. Mahgoub, Schlumberger</td>
</tr>
<tr>
<td>8</td>
<td>Compressed Natural Gas (CNG): An Alternative to Liquid Natural Gas (LNG)</td>
<td>M.J. Economides, S. Kai, and G. Subero, U. of Houston</td>
</tr>
<tr>
<td>35</td>
<td>Effect of Ultrasonic Waves on the Capillary-Imbibition Recovery of Oil</td>
<td>T. Hamida and T. Babadagli, U. of Alberta</td>
</tr>
<tr>
<td>47</td>
<td>A Conceptual Sensory System for Cross-Hole Reservoir Characterization Using a Pair of Horizontal Wells</td>
<td>A. Al-Anazi and I. Ershaghi, U. of Southern California</td>
</tr>
<tr>
<td>56</td>
<td>Effect of Water Cut on Sand Production—An Experimental Study</td>
<td>B. Wu and C.P. Tan, CSIRO Petroleum, and N. Lu, Colorado School of Mines</td>
</tr>
<tr>
<td>65</td>
<td>Oil-Based Mud Micro-Imager (OBMI) Application in Sangatta: A Field Case Study</td>
<td>P. Sembiring and S.R. Agustinus, Pertamina (Persero) DOH Kalimantan, and N. Bashir and A.H. Danardatu, Schlumberger</td>
</tr>
</tbody>
</table>
90 SPE 92829 Identifying, Characterizing, and Locating Conductive Fault(s): Multiwell Test Analysis Approach
R. Al-Obaid, F.M. Al-Thawad, and H.S. Gill, Saudi Aramco

97 SPE 92891 Smart Completion Design With Internal Gas Lifting Proven Economical for an Oil Development Project

107 SPE 92895 Integrated Approach for Improving Development of a Mature Field
L. Xiaoguang, Z. Xuewen, B. Sincock, B.W. Handono, and F. Mayanullah, PetroChina Intl.

122 SPE 92960 Managing Wellbore Instability Risk in Gas-Hydrate-Bearing Sediments

131 SPE 92962 Monitoring of Real-Time Temperature Profiles Across Multizone Reservoirs During Production and Shut-In Periods Using Permanent Fiber-Optic Distributed Temperature Systems
V. Fryer and D. Shuxing, ConocoPhillips, and Y. Otsubo, G. Brown, and P. Guilfoyle, Schlumberger

137 SPE 93048 Application of Integrated Reservoir Analysis To Optimize Development Plan
S.W. Wang, B. Shivers, Y. Setiawan, J. Inaray, I. Harmawan, and Y. Fidra, Unocal Indonesia Co.

143 SPE 93101 A Review on Recent Advances in the Numerical Simulation for Coalbed Methane Recovery Process
X.R. Wei, G.X. Wang, and P. Massarotto, U. of Queensland

153 SPE 93112 Effect of Vibration on Rock and Fluid Properties: On Seeking the Vibroseismic Technology Mechanisms
T. Ariadji, Bandung Inst. of Technology

161 SPE 93125 Quantifying Petrophysical Uncertainties
S.J. Adams, WellEval.com Ltd.

167 SPE 93137 Reservoir Simulation Challenges for Modeling a Thin Volatile Oil Rim With Large Gas Cap in the Poleng Field, Kujung-I Oil Reservoir, East Java Basin, Indonesia
J. Forrest and A. Sukmana, Schlumberger, and W. Suhana and I. Asjhari, Kodeco

183 SPE 93138 Design and Deployment of Maximum Reservoir Contact Wells With Smart Completions in the Development of a Carbonate Reservoir
202  SPE 93140 Interwell Tracer Tests: Lessons Learned From Past Field Studies  
Y. Du, New Mexico Tech, and L. Guan, Texas A&M U.

211  SPE 93148 Successfully Sterilizing the Sulfate Bacteria With Ultraviolet  
Radiation in Produced-Water Treatment in Daqing Oilfield  
J. Wang, F. Yang, X. Yuan, B. Liu, H. Wu, and X. Sui, Daqing Oilfield Co. Ltd.

216  SPE 93149 Application of Streamline Method to Hot Waterflooding Simulation  
for Heavy-Oil Recovery  
U. Pasarai and N. Arihara, Waseda U.

224  SPE 93151 An Alternative for Saving Gas Burnt in Well-Testing Operation by  
Using MPFM— A Case Study  
H. Wijayanti, Total E&P Indonésie

232  SPE 93159 A Volcanic Reservoir: Facies Distribution Model Accounting for  
Pressure Communication  
T. Yamada and Y. Okano, Japan Petroleum Exploration Co. Ltd.

241  SPE 93160 Coalbed Methane Simulator Development for Improved Recovery of  
Coalbed Methane and CO₂ Sequestration  
E. Syahrial, Lemigas

255  SPE 93161 Yakin West Waterflood Project: Looking for Opportunity To  
Maximize Recovery  
M. Yamin, A. Yuliraharjo, and R.U. Zahar, Unocal Indonesia Co., and F. Saifuddin, Unocal  
Thailand Ltd.

264  SPE 93164 Experimental Design as a Framework for Multiple Realisation History  
Matching: F6 Further Development Studies  
L. Alessio, S. Coca, and L. Bourdon, Sarawak Shell Sdn. Bhd. Malaysia

279  SPE 93168 A Fracture Treatment Design Optimization Process To Increase  
Production and Control Proppant Flowback for Low-Temperature, Low-Pressure  
Reservoirs  
B.D. Kismartopo and L. Notman, Caltex Pacific Indonesia, and T. Kritzler, T. Kristanto, and  
P. Nguyen, Halliburton

291  SPE 93183 First Installation of Hydraulic Flow Control System (Smart  
Completion) in Saudi Aramco  
A.S. Al-Dossary, S.P. Salamy, H.K. Mubarak, and S.A. Al-Aqeel, Saudi Aramco, and M.S. Boyle,  
WellDynamics

295  SPE 93186 Evaluation and Implementation of Coating Damage and Repair  
Techniques: A Case Study on 36-in. Badak-Bontang Pipeline  
A. Priambudi, N.W. Tranggono, S. Somoprawiro, and P.D. Sanjoto, Vico Indonesia
300 SPE 93187 Knowledge Discovery in Drilling Optimization for Eliminating Surprises

308 SPE 93197 Application of Adaptive Wavelets To Improve Computational Performance of Kriging
I.P. Yuwono, ChevronTexaco-IBU; A. Susanto and K. Soesianto, Gadjah Mada U.; and T.T. Tran, ChevronTexaco ETC

318 SPE 93198 Integrated Reservoir Assessment: A Way To Identify “Overlooked” Multilayered Reservoirs
R. Nikijuluw, Z.A. Suwito, and M.A. Arianto, Vico Indonesia

328 SPE 93205 Managing Uncontrollable and Controllable Uncertainties Using EDA Methods: A Fluvial- Reservoir Case Study
C.Y. Peng and R. Gupta, Curtin U. of Technology, and K. Vijayan, U. of Western Australia

339 SPE 93210 The Impact of Condensate Blockage and Completion Fluids on Gas Productivity in Gas- Condensate Reservoirs
H.A. Al-Anazi, J.R. Solares, and M.G. Al-Faifi, Saudi Aramco

350 SPE 93213 A Type of Advanced Mud-Hammer Applied to Oil Drilling
Z. Jian and J. Shang, China Oilfield Services Ltd.

T. Ariadji, Bandung Inst. of Technology; H. Suryanto, ConocoPhillips; and S. Mariani, Bandung Inst. of Technology

370 SPE 93219 Fit-for-Purpose Production Logging: Memory or Real-Time?
A.S. Al-Muthana, S. Ma, and A.A. Al-Hajari, Saudi Aramco, and S. Aboelnaga, Schlumberger