

TECHNICAL PROGRAMME

(Additions/changes made after 25 May 2010 are not reflected)

Tuesday, 8 June • 0900-1000 hours Convention Hall 1 OPENING CEREMONY AND KEYNOTE SESSION

- Opening Remarks and Acknowledgement of Sponsors by **Liu Zhenwu**, Conference Technical Programme Co-Chairman
- Remarks by **Jia Chengzao**, CPS President
- Remarks by **Behrooz Fattahi**, 2010 SPE President
- Keynote Address by **Zhou Jiping**, Senior Vice President, China Natl. Petroleum Corp. (CNPC) and President, PetroChina Co. Ltd.
- Keynote Address by **Wang Zhigang**, Vice President, China Petroleum & Chemical Corp. (SINOPEC)
- Keynote Address by **Zhou Shouwei**, Vice President, China Natl. Offshore Oil Corp. (CNOOC)

Tuesday, 8 June • 1015-1215 hours Convention Hall 1 EXECUTIVE PLENARY SESSION

Session Co-Moderators:

Liu Zhenwu, Vice President, Advisory Center, China Natl. Petroleum Corp.

Dato' Wee Yiau Hin, Executive Vice President, PETRONAS Exploration and Production

Speakers:

- **H.E. Dr. Mohammed Hamed Al-Rumhy**, Minister of Oil and Gas Oman
- **Mark W. Albers**, Senior Vice President, Exxon Mobil Corp.
- **Mohammed Al-Qahtani**, Executive Director, Petroleum Engineering & Development, Saudi Aramco
- **Andrew Gould**, Chairman and CEO, Schlumberger
- **Matthias Bichsel**, Member of Executive Committee of Royal Dutch Shell plc and Director of Projects and Technology, Shell Intl. E&P B.V.

Tuesday, 8 June • 1400-1600 hours Convention Hall 1 PANEL SESSION 1: MEETING CURRENT AND FUTURE ENERGY CHALLENGES

Session Coordinator:

Pinar O. Yilmaz, Manager, External Project Collaboration, ExxonMobil Exploration Co.

Session Co-Chairperson:

Hou Hongbin, Vice President, Intl. E&P, SINOPEC

Session Moderator:

Rob Franklin, President, ExxonMobil Upstream Ventures

Speakers:

- **Bruce Clement**, Executive Director & Chief Executive Officer, Roc Oil Co. Ltd.
- **Jean-Marie Guillermou**, Senior Vice President, Asia Pacific, E&P, Total
- **He Jiangchuan**, Vice President, PetroChina E&P Co.
- **Bob Fryklund**, Vice President, IHS Cambridge Energy Research Assocs. (CERA)

Tuesday, 8 June • 1400-1600 hours Conference Room 302 TECHNICAL SESSION 1: MANAGEMENT AND INFORMATION

Session Chairpersons:

Andy Benson, Core Lab Petroleum Science & Technology (Beijing) Co. Ltd.

Wang Yong, Weatherford Intl. Ltd

Time	Paper	
1400	130727	Case Histories of International Partnerships for Training, Education, and Research Through Teams of NOCs, IOCs, and Universities C.W. Van Kirk and G. L. Baughman, Colorado School of Mines
1430	130654	A Comparison of the Cultural Impacts on Leadership Preferences between Overseas Chinese Petroleum Professionals and GLOBE Scores Y. Li, BP America; P. Duncan and M. Green, Our Lady of the Lake U.

TECHNICAL PROGRAMME

- 1500 132092 Currencies and their Effect on Planning in the Oil and Gas Industry**
J. Harden, ASA, CPG, Ernst & Young LLP
- 1530 130295 Fiscal Regimes in a Volatile Oil Price Era: What Options Exist for Balancing the Interest of the Resource Country and Investor Company?**
H. Onyeukwu, U. of Dundee

Tuesday, 8 June • 1400-1600 hours
Conference Room 305A/B
TECHNICAL SESSION 2: DRILLING BIT/ HYDRAULIC

Session Chairpersons:
Liang Jin, Shell China E&P Co. Ltd.
Zhao Jingmin, NOV Grant Prideco

Time Paper

- 1400 132143 New Cutter Technology for Faster Drilling in Hard/Abrasive Formations**
B. Plemons, Anadarko Petroleum Corp., C. Douglas, Y. Shen, G. Zhan, Y. Zhang, Smith Intl.
- 1430 132057 Accurate Matching of Bit and Reamer Tools Delivers Optimised Drilling Performance**
S. Barton and R. Weeden, NOV Downhole
- 1500 130829 Hydraulic Pulsed Cavitating Jet Assisted Deep Drilling: An Approach to Improve Rate of Penetration**
G. Li, H. Shi, J. Niu, Z. Huang, S. Tian and X. Song, China U. of Petroleum, Beijing
- 1530 130923 A New BHA's Theoretical Analysis and its Successful Applications**
X. Zhu, Y. Jia and H. Tong, Southwest Petroleum U.

Tuesday, 8 June • 1400-1600 hours
Conference Room 305C
TECHNICAL SESSION 3: HSE

Session Chairpersons:
Liu He, RIPED, PetroChina Co. Ltd.
James S. Wang, Cabot China Ltd. .

Time Paper

- 1400 131456 Step Change in Injury Rates through Integrated Operator and Service Company Safety Management**
H. Krus and S. Landgrave, Brunei Shell Petroleum; F. J. Krone, KCA-Deutag; D. Christiansen, Seadrill; R. Mientjes and J. Alyususuf, Schlumberger; M. Dawson, Halliburton; J. Flores, BHI;
- 1430 131759 Impact of Rock Microstructures on the Supercritical CO₂ Enhanced Gas Recovery**
J.G. Wang, J. Liu, J. Liu, and Z. Chen, U. of Western Australia
- 1500 130475 An Appraisal of Soil Pollution in Oil and Gas Production Environment: A Case Study of Heavy Metals Concentration in Ebocha and Akri Oil Fields**
C.I. Ossai, Nigerian Agip Oil Co.; U.I. Duru and I.A. Ossai, Federal U. of Technology, and I.M.T. Arubi, Cranfield U.
- 1530 131491 The Green Approach in Downhole Workover Operations**
H. Liu, RIPED, PetroChina Co. Ltd., P. Ye and X. Chen, Daqing Oil Field Co.

Alternates/Posters

- 131908 Formation of Carbonyl Sulfide during Molecular Sieve Dehydration Process from High Sour Natural Gas in China**
Y. Tu, H. Chang and J. He, RINGT PetroChina Southwest Oil & Gasfield Co.
- 130143 The Mechanism of Pressure Control Problem in High H₂S/CO₂ Gas Wells**
Z. Zhi, J. Fu, Y. Lin, T. Shi, Southwest Petroleum U.; H. Fan B. Xia, J. Zhang, Zhongyuan Petroleum Exploration Bureau

TECHNICAL PROGRAMME

131630 Systematic Elimination and Mitigation of Process Hazards in Project Design

D. A. Kenefake, J. King, and D. Victory, ExxonMobil Development Co.

132053 Flow Induced Corrosion of API Round Thread Connection

H. Zhu, Y. Lin, and Z. Zhang, Southwest Petroleum U. ; D. Zeng, Southwest Oil and Gas Field Co. ; D. Zhang, Jilin Field Co.; Y. Sun, CCDC Drilling & Production Technology Research Inst.

131626 An Effective Stimulation Fluid for Deep Carbonate Reservoirs: A Core Flood Study

M.A. Mahmoud and H.A. Nasr-El-Din, Texas A&M U.; C.A. De Wolf and J.N LePage, AkzoNobel

131797 Fracture Geometry Inversion Technique in Low Permeability Reservoir for Horizontal Well

W. Wang, China U. of Petroleum and PetroChina Daqing Oilfield Co. Ltd.; H. Liu, RIPED, PetroChina, Y. Yu, B. Wang, PetroChina Daqing Oilfield Co. Ltd.

Tuesday, 8 June • 1400-1600 hours

Conference Room 307

TECHNICAL SESSION 4: STIMULATION 1

Session Chairpersons:

Dan Hill, Texas A&M U.

Zheng Ziqiong, Baker Hughes Inc.

Time Paper

- 1400 132218 Wiremesh: A Novel Shale Fracturing Simulator**
W. Xu, M. Thiercelin, U. Ganguly, X. Weng, H. Gu, H. Onda, J. Sun and J. Le Calvez, Schlumberger
- 1430 131736 Modeling Shear Dominated Hydraulic Fracturing as a Coupled Fluid-Solid Interaction**
M. Nassir, A. Settari and R. Wan, U. of Calgary
- 1500 130794 Modeling Well Performance for Fractured Horizontal Gas Wells**
J. Lin and D. Zhu, Texas A&M U.
- 1530 131689 Case History of Horizontal Well Fracturing Performance in the Daqing Oilfield, China**
W. Wang, China U. of Petroleum and PetroChina Daqing Oilfield Co. Ltd.; X. Liu, Pinnacle; P. Tang, Y. Liu, C. Zhao and Z. Wu, PetroChina Daqing Oilfield Co. Ltd

Alternates/Posters

130586 Propagation of Regular HCl Acids in Carbonate Rocks: The Impact of an In-Situ Gelled Acid Stage

A.M. Gomaa and H.A. Nasr-El-Din, Texas A&M U.

Tuesday, 8 June • 1400-1600 hours

Conference Room 308

TECHNICAL SESSION 5: FLUID FLOW MECHANISM IN RESERVOIRS

Session Chairpersons:

Tsai-Bao Kuo, Schlumberger

Li Kewen, Peking U./Stanford U.

Time Paper

- 1400 131633 Relative Permeability Estimation from Displacement Experiments Using EnKF Method**
H. Li, D. Yang, and M.A. Arhuoma, U. of Regina
- 1430 131895 Improvement of Flow Performance through Wettability Modification for Extra Low Permeability Reservoirs**
Q. Liu and H. Wang, RIPED, CNPC and P. Wu, China Natl. Petroleum Corp.
- 1500 130996 Application of Horizontal Wells to Reduce Condensate Blockage in Gas Condensate Reservoirs**
N. Miller and H. Nasrabadi, Texas A&M University-Qatar; D. Zhu, Texas A&M U.
- 1530 131388 Calculation of Oil and Water Relative Permeability for Extra Low Permeability Reservoir**
R. Liu, H. Liu, X. Li and J. Wang, China U. of Petroleum Beijing; C. Pang, China Oilfield Service Ltd., CNOOC

TECHNICAL PROGRAMME

Alternates/Posters

- 132229 Effect of Fracture and Flow Orientation on Two-Phase Flow in an Oil-Wet Fracture: Relative Permeability Curves and Flow Structures**
S. Shad, B.B. Maini and I.D. Gates, U. of Calgary
- 129627 In Situ Estimation of Relative Permeability from Resistivity Measurements**
K. Li, M. Shapiro and R.N. Horne, Stanford U.; S. Ma, A. Hajari and M. Mudhhi, Saudi Aramco
- 129803 Modeling Formation Damage and Wettability Alteration Induced by Asphaltene Precipitation and their Effects on Percolation Performances during Oil Production**
B. Ju and T. Fan, China U. of Geosciences ; J. Qin and X. Chen, PetroChina Research Inst. of Petroleum Exploration and Development ; Y. Wu, Colorado School of Mines
- 132219 Transient Behavior of Horizontal Wells with Inflow Control Devices for Inflow Profile Modification**
B.D. Poe Jr and A. Erkal, Schlumberger

Wednesday, 9 June • 0830-1000 hours
Conference Room 302
TECHNICAL SESSION 6: NATURAL GAS - UPSTREAM

Session Chairpersons:
Jonathan T. Kwan, Quanelle Inc.
Tan Jian, PetroChina E&P Co.

- | Time | Paper |
|------|---|
| 0830 | 132273 Developing Offshore Tight Gas Sands and Navigating Subsurface Uncertainty
C.F. Tucker, M.C. Dean, K. Bate, P. Omotosho, F. Walli, Z. Ahmad, and P. Brittingham Brunei Shell Petroleum Sdn. Bhd.; R. Pahmiyer, Shell Intl. E&P Inc. |
| 0850 | 131220 Seismic Prediction of Carbonate Reef or Oolitic Reservoirs in Central Sichuan Basin
Y. Deng, Y. Li , Z. Li, Y. Zhang, W. Jiang, CNPC Chuanqing Drilling Engineering Co. Ltd Sichuan Geophysical Co. |
| 0910 | 130284 Experimental Study on CO₂ Monitoring and Saturation With Combined P-Wave Velocity and Resistivity
J. Kim, Z. Xue and T. Matsuoka, Kyoto U. |
| 0930 | 130985 Operational Geological Uncertainties and Improvement Plan for 2km Dual-Lateral Horizontal Well within Tight Gas Reservoir in Changbei Tight Gas Field, Ordos Basin, West China
X. Gong, K. Soo, W. Su, and S. Navpreet, Shell China E&P Co., Ltd |

Alternates/Posters

- 130892 Study on Development Mechanism of Commingling Production in Low-Permeability Gas Reservoirs**
P. Guo, J. Wang, Q. Liu, and M. Zhang, Southwest Petroleum U.
- 130755 A New Method for Forecasting Dynamic Reserve of Fractured Gas Well in Low-permeability and Tight Gas Reservoir**
R. Luo and J. Feng , RIPED, PetroChina; Q. Lei and Y. Han, RIPED-Langfang, PetroChina; C. Ma, SIPC, SINOPEC

TECHNICAL PROGRAMME

Wednesday, 9 June • 0830-1000 hours
 Conference Room 305A/B
**TECHNICAL SESSION 7: DRILLING
 OPTIMISATION**

Session Chairpersons:
Ge Yunhua, China Natl. Petroleum Corp.
Kok Kuang Thou, Halliburton

Time	Paper
0830	131356 Use of Modified Hollow Cylinder Test in Laboratory for Simulation of Downhole Drilling Condition in Shale G.K. Gabrielsen and P. Horsrud, Statoil ASA; J.F. Stenebraten, O. Nes, and R.M. Holt, SINTEF Petroleum Research
0850	125991 Inaccessible Drilling Targets and Completions Operation Made Possible by the Alleviation of Excessive Torque and Drag J.E. McCormick and M.A. Frilot, Weatherford; T.P. Long, Chevron
0910	131234 Exact Non-Newtonian Flow Analysis of Yield Stress Fluids in Highly Eccentric Borehole Annuli with Pipe or Casing Translation and Rotation W. Chin and X. Zhuang, Stratamagnetic Software ,LLC
0930	131886 A Study on Drilling Risk Real Time Recognition Technology Based on Fuzzy Reasoning Z. Lian, Y. Zhou, Q. Zhao, and Z. Huo, China Natl. Petroleum Corp.

Alternates/Posters

- 131489 Solid Expandable Tubular Combined with Swellable Elastomers Facilitate Multizonal Isolation and Fracturing, with Nothing Left in the Well Bore to Drill, for Efficient Development of Tight Gas Reservoirs in Cost Effective Way**
M.G. Anjum, U. Shafeeq and M.A. Younas, UET Lahore
- 131891 The Application of Shallow Horizontal Wells in Sudan**
B. Liu ,S. Zhang and S. Zhou, China Natl. Petroleum Corp.

Wednesday, 9 June • 0830-1000 hours
 Conference Room 305C
TECHNICAL SESSION 8: CEMENTING

Session Chairpersons:
Ding Shidong, SINOPEC Petroleum E&P Research Inst.
Yan Jienian, China U. of Petroleum Beijing

Time	Paper
0830	132228 Cementing Solutions for Corrosive Well Environments A. Brandl, J. Cutler, A. Seholm, M. Sansil, G. Braun, BJ Services Co.
0850	131878 Analysis of Cement Sheath Coupling Effects of Temperature and Pressure in Non-Uniform In-Situ Stress Field Y. Li, S. Liu , Z. Wang, J. Yuan , and F. Qi, China Natl. Petroleum Corp.
0910	131810 New Cementing Technologies Successfully Solved the Problems in Shallow Gas, Low Temperature and Easy Leakage Formations Z. Nie and B. Xia, China U. of Geosciences ; B. Dong, RIPED; X. Zheng, Kazakhstan North Buzachi Joint Operating Co.; C. Xie, China Natl. Petroleum Corp.
0930	131052 A New Method to Evaluate the Gas Migration for Cement Slurries H. Zhu, J. Qu, A. Liu, J. Zou and J. Xu, China Natl. Petroleum Corp. Offshore Engineering Co. Ltd.

Alternates/Posters

- 131568 Cementing in HPHT Gas Environment Using a Novel Flexible And Expandable Cement Technology To Withstand Pressure And Temperature Cycles**
J.A-IThuwaini, M. Emad, and J. Ekpe, Lukoil Saudi Arabia Energy Ltd.; M. Jaffery, D. Ong, R. Bermudez, S. Taoutaou and B. Ahmad, Schlumberger

TECHNICAL PROGRAMME

- 130266 Design and Performance Research of A Unique Deepwater Cement Slurry**
C. Wang, R. Wang, Y. Bu and W. Zhou, China U. of Petroleum (East)
- 130974 Applications of Bio-Enzymatic Completion Fluid in the Tight Sand Gas Reservoirs of Ordos Daniudi Gas Field**
Q. Lan and L. Wang, Drilling Research Inst. of Shengli Oilfield; G. Li, J. Zhang and H. Li, Drilling Research Inst. of Shengli Oilfield and China U. of Petroleum
- 131396 Research on the Formation Pressure Prediction in the Exploration Area of Northeast Sichuan, China**
C. Jie, Shengli Petroleum Admin. and China U. of Petroleum; M. Sun, Shengli Petroleum Admin; Z. Li, Yangtze U.

Wednesday, 9 June • 0830-1000 hours
Conference Room 307
TECHNICAL SESSION 9: STIMULATION 2

Session Chairpersons:
Ding Zhu, Texas A&M U.
Raymond Tibbles, Schlumberger

- | Time | Paper |
|------|---|
| 0830 | 115771 Hydraulic Fracture Complexity: Diagnosis, Remediation, and Exploitation
C.L. Cipolla, Schlumberger; N.R. Warpinski and M.J. Mayerhofer, Pinnacle Technologies |
| 0850 | 131591 New Correlations of Acid Fracture Conductivity at Low Closure Stress Based on the Spatial Distributions of Formation Properties
J. Mou, China U. of Petroleum Beijing ; D. Zhu and A.D. Hill, Texas A&M U. |
| 0910 | 131869 Lessons Learned from Stimulation Treatments and Filter Cake Removal Practices in High Permeability Carbonate during the Drilling Phase
S.H. Al-Mutairi and M.A. Al-Dhufairi, Saudi Aramco |

- 0930 131152 Investigation and Application of Multistage Hydrjet-Fracturing in Oil and Gas Well Stimulation in China**
G. Li, Z. Huang, S. Tian, J. Niu, H. Qu and S. Mao, China U. of Petroleum Beijing

Alternates/Posters

- 131551 A Successful Application of Near-Wellbore Stimulation Using Fluidic-Oscillation Technique in North Africa Oil Field**
K. Kritsanaphak, S. Tirichine and M. Kammourieh, Halliburton
- 131216 Application and Study of Acid Technique Using Novel Selective Emulsified Acid System**
C. Xiong, F. Zhou, Y. Liu, X. Yang, X. Liu, Y. Shi and Y. Tan, RIPED, PetroChina; F. Zhang, X. Ji, S. Qin, S. Huang and X. Wang, TARIM Oilfield Co. PetroChina
- 131796 A Study and Application of Multi-Section Acidizing Technology with Original Production String in Horizontal Well**
H. Liu, RIPED, PetroChina Co. Ltd.; F. Biao, U. of Science and Technology of China

Wednesday, 9 June • 0830-1000 hours
Conference Room 308
TECHNICAL SESSION 10: RESERVOIR DYNAMICS

Session Chairpersons:
Tsai-Bao Kuo, Schlumberger
D.M. Anwar Raja Ibrahim, PetroMalaysia Sdn. Bhd.

- | Time | Paper |
|------|--|
| 0830 | 131363 An Integrated Method for Well Deliverability Forecasting: A Field Example in ShengLi Oilfield
Y. Xie and Z. B. Xin, SINOPEC ShengLi Oilfield Co. ; J.S. Zhou, J. Wang, J. Zhang, K.K. Chee, J. Zhou, Y.Q. Niu and L. Chen, Schlumberger |
| 0850 | 131450 A Study on Deliverability Ratio Relationship between Horizontal Well and Vertical Well
Y. Luo, G. Zhu and F. Sun, CNOOC Research Inst. |

TECHNICAL PROGRAMME

- 0910 131472 Logging Response Characteristic Analyses and Saturation Calculation Method for Polymer Flooded Reservoir**
C. Liu, Q. Yang and H. Ma, PetroChina Daqing Oilfield Co. Ltd.; W. Yan, PetroChina Daqing Oilfield Co. Ltd. and China U. of Geology
- 0930 130773 CO₂ Sequestration Monitoring in a Low Formation Water Salinity Reservoir**
D. Murray and X.W. Yang, Schlumberger Oilfield Services; T. Horie, INPEX Corporation.; T. Yoshimura, Engineering Advancement Assn. of Japan (ENAA); S. Mito, Research Inst. of Innovative Technology for the Earth(RITE)

Alternates/Posters

- 131876 The Dynamic Analysis of Dry-Gas ReInjection in a Waterdrive Gas-Condensate Reservoir Case Study: Yaha Gas-Condensate Reservoir, Tarim Basin, West China**
Y. Jiao, B. Li and Y. Li, RIPED, PetroChina; W. Xie, Tarim Oilfield Co.
- 131486 Hydraulic Flow Unit Based Permeability Characterization and Rapid Production Prediction Workflow for an Offshore Field, South China Sea**
S.S. Guo and J. Cai, CNOOC CCLZ; J. Zhou, Y.Q. Niu, L.X. Feng, Y.H. Yu, K.K. Chee, Schlumberger;
- 131482 A Quick-and-Novel Method in Evaluating the Producing Performance of Single-Layer in the Multilayered Sandstone Oilfield**
Q. Du, J. Guo, L. Wei, S. Yin, S. Zuo, J. Tang, W. Cao and B. Liu, Daqing Oilfield Co. Ltd., PetroChina; L. Zhu, Daqing Oilfield Co. Ltd., PetroChina and Chinese Academy of Science

Wednesday, 9 June • 1030-1200 hours
Convention Hall 2A
PANEL SESSION 2: MANAGEMENT OF TECHNOLOGY AND INNOVATION

Session Coordinator:
Lim Min-Teong, Regional Technology, Performance & Planning Manager, Asia Pacific, Shell EP Intl. Ltd.

Session Co-Chairpersons:
Ford Brett, President, PetroSkills
Zhang Fengjiu, Deputy Chief Engineer, CNOOC Ltd.

Session Moderator:
Ganesh Thakur, Vice President, Global Advisor & Chevron Fellow, Chevron Energy Technology Co.

- Speakers:**
- **Stephen Greenlee**, President, ExxonMobil Upstream Research Co.
 - **Jens-Petter Kvarstein**, Vice President, R&D, TNE, Statoil
 - **Fang Chaoliang**, Deputy Director General, R&D Dept., CNPC
 - **Jiang Wei**, General Manager, Drilling & Completion Dept., CNOOC Ltd.
 - **Derek Mathieson**, President Technology and Product Lines, Baker Hughes Inc.
 - **Bruce Levell**, Vice President Emerging Technologies, Chief Scientist-Geology, Project and Technology, Shell Intl. E&P B.V.

Wednesday, 9 June • 1030-1200 hours
Conference Room 302
TECHNICAL SESSION 11: NATURAL GAS - DOWNSTREAM

Session Chairpersons:
Jonathan T. Kwan, Quanelle Inc.
Su Chunmei, PetroChina Co. Ltd.

- | Time | Paper | |
|------|--------|--|
| 1030 | 131660 | Role of Gas Markets in Gas Monetization. Case Study: Europe Gas Market Development
H. Nikl and D. Pennington-Bick, ExxonMobil |
| 1050 | 131239 | A Fast and Efficiency Numerical Simulation Method for Supersonic Gas Processing
D. Jang, Eriqitai, C. Wang, H. Liu and Y. Yuan, Beijing U. of Aeronautics and Astronautics |
| 1110 | 131614 | Enabling Materials and Corrosion Technologies for Gas Developments
E.J. Wright, ExxonMobil Development Co. |

TECHNICAL PROGRAMME

- 1130 131381 **Comparison of Completion and Heterogeneity Effect on CO₂ Sequestration in Shallow and Deep Saline Aquifers**
 F. Yang, Missouri U. of Science & Technology and China U. of Geosciences-Neijing (CUGB); B. Bai, S. Dunn-Norman and D. Wronkiewicz, Missouri U. of Science & Technology; D. Tang, China U. of Geosciences-Neijing (CUGB)

Alternate/Poster

- 130135 **Novel Predictive Tool for an Accurate Estimation of the Saturated Water Content of Sour Natural Gases**
 A. Bahadori, H.B. Vuthaluru and J. Jalili, Curtin U. of Technology

Wednesday, 9 June • 1030-1200 hours
 Conference Room 305A/B
TECHNICAL SESSION 12: INNOVATIVE TECHNOLOGIES IN DRILLING OPERATION

Session Chairpersons:

Li Gensheng, China U. of Petroleum Beijing
Peng Shuangjiu, China Nanhai Magcobar Mud Corp. Ltd.

- | Time | Paper |
|------|--|
| 1030 | 131868 A Innovative Technology to Extend the Borehole Section in Gas Drilling
H. Huang, China U. of Petroleum Beijing; N. Sun, J. Yu, J. Feng and H. Wang, DRI of China Natl. Petroleum Corp. |
| 1050 | 131347 Is it Possible to Inject Larger Sizes and Higher Solids Concentrations of Drill Cuttings?
L. Ji, Q. Guo and C. Wang, M-I SWACO |
| 1110 | 130201 Mechanism of Well Deviation in Air Drilling and its Control
Z. Zhao, D. Gao and D. Zheng, China U. of Petroleum Beijing |
| 1130 | 130823 Numerical Simulation of Subsea Wellhead Stability for Deepwater Drilling
Z. Guan, China U. of Petroleum; K. Su, Chong Qing U. of Science and Technology ; Y. Su, China Drilling Engineering Technology Research Institute, CNPC |

Alternates/Posters

- 130523 **Research of Conductor Setting Depth Using Jetting in the Surface of Deepwater**
 J. Yang, B. Zhang and C. Zhou, China U. of Petroleum Beijing; S. Liu, J. Zhang and P. Wang, CNOOC Research Centre; H. Tang and J. Luo, Shenzhen Limited Branch Co., CNOOC
- 129640 **Investigating Productivity of Vertical and Horizontal Wells in one of the Persian Oil Fields**
 A.M. Paiaman and G.A. Safian, Natl. Iranian Oil Co.; M.R. Karimi, Islamic Azad U.

Wednesday, 9 June • 1030-1200 hours
 Conference Room 305C
TECHNICAL SESSION 13: PRODUCTION ENHANCEMENT AND ASSURANCE

Session Chairpersons:

Liu Yuzhang, PetroChina Co. Ltd.
Yuan Mingdong, Baker Hughes Inc.

- | Time | Paper |
|------|--|
| 1030 | 132274 Using MARS (Multiple Application Re-Injection System) Technology for Improving Oil Recovery and Reducing Production Risk
I. Donald and R. Sangster, Cameron MARS Production Systems |
| 1050 | 130994 Innovative Drag Reduction of Flow in Rock's Micro-Channels Using Nano Particles Adsorbing Method
Q. Di, C. Gu and Y. Qian, Shanghai U.; C. Shen, Z. Wang and B. Jing, SINOPEC |
| 1110 | 132237 Scale Prediction for Oil and Gas Production
A.T. Kan and M.B. Tomson, Rice U. |
| 1130 | 131314 The Inhibition of Gas Hydrates and Synergy of the Inhibiting Molecules
H. Guan, M-I SWACO Production Technologies |

TECHNICAL PROGRAMME

Wednesday, 9 June • 1030-1200 hours

Conference Room 307

TECHNICAL SESSION 14: WELLBORE STABILITY

Session Chairperson:

Zheng Ziqiong, Baker Hughes Inc.

Thomas Gee, Weatherford Intl. Ltd.

- | Time | Paper | |
|------|--------|---|
| 1030 | 132187 | Using Drilling and Logging Data for Developing 1D Mechanical Earth Model for a Mature Oil Field to Predict and Mitigate Wellbore Stability Challenges
M. Afsari and S.M. Razmgir, Iranian Offshore Oil Co.; M. Amani, Texas A&M U. at Qatar; H. Karim, Schlumberger; S. Yousefi, Natl. Iranian Drilling Co. |
| 1050 | 130635 | Numerical Analysis on Subsalt Wellbore Stability in the Vioska-Knoll Deepwaters of the Northern Region of the Gulf of Mexico
X. Shen, M. Bai and R. Smith, Halliburton |
| 1110 | 131034 | Borehole Stability Challenges in Gas Drilling: Case Studies in West Sichuan Basin
G. Li, Y. Meng, H. Liu, Y. Zhou and Y. Zhu, Southwest Petroleum U. |
| 1130 | 131605 | A New Water-Absorbent Resin for Lost Circulation Control
X. Lai, J. Guo, Y. Zhou, X. Jiang, X. Li and Z. Wang, SINOPEC |

Alternates/Posters

- 131889 Application of Catastrophic Theory to Predict Wellbore Instability in Drilling**
J. Shi, J. Zhang, Y. Liu, X. Meng, Juan Jin and F. Ling, RIPED of PetroChina; Z. Liu, CNODC of PetroChina; L. Wang, JILIN Oilfield Co. PetroChina.
- 131533 Drilling Fluid Challenge during the Ultra-Deep HT/HP/HS Drilling in the Mountainous Area, Tarim Basin**
Y. Ye, China U. of Petroleum; W. An, S. Wang and F. Luo, PetroChina Tarim Oilfield Co.
- 131068 The Study of The Circulation of Drilling Foam**
L. Wan, Y. Meng, Y. Li, J. Wang, X. Shu and Q. Zeng, Southwest Petroleum U.

Wednesday, 9 June • 1030-1200 hours

Conference Room 308

TECHNICAL SESSION 15: RESERVOIR TECHNOLOGY

Session Chairpersons:

Norio Arihara, Waseda U.

Paul F. Worthington, Gaffrey, Cline & Assocs. (Consultant) Pte. Ltd.

- | Time | Paper | |
|------|--------|---|
| 1030 | 130305 | Interpretation of DFA Color Gradients in Oil Columns Using the Flory-Huggins Solubility Model
J.Y. Zuo, D. Freed, O.C. Mullins, D. Zhang and A. Gisolf, Schlumberger |
| 1050 | 131370 | Using Downhole Temperature Measurement to Assist Reservoir Characterization and Optimisation
Z. Li, J. Yin, D. Zhu and A. Datta-Gupta, Texas A&M U. |
| 1110 | 130621 | Study of Tracer Test Application for Gas Reservoir Characterisation during Underground Gas Storage Process
B. Moradi, Iranian Central Oil Field Co.; S.A. Tahami, Petropars Oil and Gas Inst.; S.F Shariatpanahi, U. of Stavanger |
| 1130 | 131462 | Low Resistivity Pay Evaluation Using Triaxial Induction in Offshore South China
J. Cai, H. Wu and S. Guo, CNOOC Ltd.; H. Guan and O. Desport, Schlumberger; |

Alternates/Posters

- 130190 Synergetic Use of Cluster Analysis and Artificial Intelligence Techniques to Improve Reservoir Upscaling**
M. Rezazadeh, Natl. Iranian Oil Co.; S.G. Choobary, Abadan Inst. Of Technology

TECHNICAL PROGRAMME

Wednesday, 9 June • 1400-1530 hours

Conference Room 302

TECHNICAL SESSION 16: SPECIAL FOCUS AREAS IN CHINA

Session Chairpersons:

Andy Benson, Core Lab Petroleum Science & Technology Co. Ltd. (Beijing)

Liu Qing, Total (China) E&P Ventures

- | Time | Paper | |
|------|--------|---|
| 1400 | 131114 | <p>Collaboration and Communication Lead to Continuous Improvement in 8 ½-in. Bit Design and Improved Drilling Efficiencies in Changbei Horizontal Application</p> <p>R. Lee, F. Felderhoff, N Samtoy, A. Richards and J. Zeng, Baker Hughes; I. Tan, Shell China Limited.; Z. Chen, PetroChina</p> |
| 1420 | 130551 | <p>Ahead of Bit Pore Pressure Prediction using VSP - a Case Study in South China Sea</p> <p>Y. Xie and J. Cai, CNOOC Ltd – Zhanjiang; L. Zhen, H. Tian, Y. Li. and A. Voskamp, Schlumberger Data & Consulting Services; B. Wu, CSIRO Earth Science and Resources Engineering</p> |
| 1440 | 131573 | <p>Outlook of Drilling/Production Equipment Management and Rebuilding Techniques in Daqing Oilfield</p> <p>C. Gang, G. Shi, M. Lu, M. Liu, H. Wang , Y. Zhao and B. Yu, Daqing Oilfield Co. Ltd.; H. Liu, RIPED, PetroChina</p> |
| 1500 | 130897 | <p>Material Properties Standard of Marine Drilling Riser</p> <p>J. Wang, K. Lin, Z. Shen and S. Gong, China Natl. Petroleum Corp.</p> |

Alternates/Posters

- 131138 **Collaborative Operation to Face Subsurface and Operational Challenges – A Success Story of Fracturing Changbei Vertical Wells**
- L. Jin, F. van der Bas and S. Vitthal, Shell Intl. E&P ; C. Zhu, Shell China Exploration and Production; L. Hu, PetroChina ChangQing Oilfield Co.

- 130382 **The Performance Characteristics of Cr³⁺ Polymer Gel and Its Application Analysis in Bohai Oilfield**
- X.G. Lu and R.J. Wang, Daqing Petroleum Inst.; W. Wang, Louisiana State U.; Y.G. Liu, and J.C. Shan, Tianjin Company of CNOOC, Ltd.
- 131302 **Comprehensive Pre-Well Preparation and Collaboration Leads to Record Drilling Performance in Challenging Exploration Well in Sichuan**
- R. Lee, G. Chang, B. Li, and W. Zhang, Baker Hughes Inc.; J. Xu ,C.Q. Zhu and J.X. Xia, SINOPEC Southwest Co.
- 132050 **Managed Pressure Drilling Micro Flux technology Allows Safer Drilling in Highly Sour Reservoirs**
- C.Y. Guo, H.J. Zhang and James Epp, Weatherford China; S. Nas, Weatherford Solutions
- 130543 **Analysis on Scaling Substance of the E252 Heat Exchanger of Cracking Unit**
- W. Duan, H. Wen, L. Wang, Y. Huang, Research Inst. of PetroChina Liaoyang Petrochemical Co.

Wednesday, 9 June • 1400-1530 hours

Conference Room 305A/B

TECHNICAL SESSION 17: DIRECTIONAL DRILLING/EXTENDED REACH DRILLING

Session Chairpersons:

Ge Yunhua, China Natl. Petroleum Corp.

Sean (Xianping) Wu, Smith Technologies

- | Time | Paper | |
|------|--------|---|
| 1400 | 132136 | <p>Rheology of a New Gel Used for Severe Lost Circulation Control</p> <p>X. Nie, P. Luo, P. Wang and L. Yang, Southwest Petroleum U.; X. Zhang, Sichuan Guangya Technology Co., Ltd.</p> |
| 1420 | 115138 | <p>Delivering Steering Success in Problematic Soft Formation Directional Wells</p> <p>S. Barton, K. Card and G. Pierce, NOV Downhole</p> |

TECHNICAL PROGRAMME

1440 131391 New Directional Drilling With Liner Systems Allows Logging and Directional Control While Getting Casing Across Trouble Zones

A. Srinivasan, R. Frisby, T.J. Talbot, and M. Paraschiv, Baker Hughes Inc.

1500 131378 Hole Cleaning Performance of Gasified Drilling Fluids in Horizontal Well Sections

M.E. Ozbayoglu, U. of Tulsa; R.O. Ettehadi, Middle East Technical U.; A.M. Ozbayoglu and E. Yuksel, TOBB U. of Economics & Technology

1420 131943 Material Evaluation and Selection of OCTG and Gathering Lines for High Sour Gas Fields

D. Zeng, Southwest Oil & Gas Field Co. and Southwest Petroleum U.; L. Huang, T. Gu, S. Huo and Y. Huang, Southwest Oil & Gas Field Co.; Y. Lin, CNPC Key Laboratory for Tubular Goods; H. Zhu, CNPC Key Laboratory for Tubular Goods and Southwest Petroleum U.

1440 131137 Steady-State Heat Transfer Models for Fully And Partially Buried Pipelines

C. Ovuworie, Schlumberger

1500 131870 Scientific Evaluation of Energy Consumption in Gas Plants to Promote the Optimisation of Processing Facilities

Q. Li, Y. Liu, Y. Zhao and Q. Li, PetroChina Planning and Engineering Inst.

Alternates/Posters

131357 Rotary Steerable System Enhances Drilling Performance on Horizontal Shale Wells

J. Sugiura and S. Jones, PathFinder Energy Services.

131147 Measurement and Analytical Approach for Geological Core Investigation Using Photogrammetric Methods

P. Sun and X. Wu, China U. of Geosciences ; Mike Deng ,Jereh Oilfield Services Co.

Alternates/Posters

131331 Study on External Detection Techniques for Pipeline Corrosion in High Sour Gas Fields

C. Li, W. Jia , K. Liao, X. Wu and E. Liu, Southwest Petroleum U.

131948 Studies on the Electro-Catalytic Degradation of EOR Wastewater by Ce-Ti/ TiO₂ Electrode

Y. Zhang, Y. Zhu, D. Han, D. Ma, and D. Han, RIPED, PetroChina Co. Ltd.; S. Wang, Langfang Branch of RIPED

Wednesday, 9 June • 1400-1530 hours

Conference Room 305C

TECHNICAL SESSION 18: SURFACE FACILITIES AND OPERATIONS

Session Chairpersons:

Mike Deng, Jereh Oilfield Services

Li Qing, PetroChina Co. Ltd.

Time Paper

1400 130910 The Use of Monte Carlo Simulation for Uncertainty Estimation in Gamma Densitometry Measurements
T.I.M. Arubi and H. Yeung, Cranfield U.

Wednesday, 9 June • 1400-1530 hours

Conference Room 307

TECHNICAL SESSION 19: BEST OF AAPG

Session Chairperson:

Pinar O. Yilmaz, ExxonMobil Exploration Co.

Time

1400 A Quantitative Model for Salt Deposition in Actively Spreading Basins

B. Montaron, Schlumberger and Paul Tapponnier, IPG and EOS

TECHNICAL PROGRAMME

- 1420 Timing of Hydrocarbon Migration into Anticlines of the North American Cordilleran Thrust Belt and Foreland Structures: Similar Structural and Stratigraphic Trends Have Very Different Results**
M.L. Pinnell, F.C. Moulton and Greg Wood, Chief Oil and Gas, LLC; G. Newman and R.G. Stanton, Consultant
- 1440 The Emerging Deepwater Province of NW Egypt**
P. Krois and G. Tari, OMV E&P; K. Hannke, OMV UK; H. Hussein and B. Novotny, OMV Egypt
- 1500 Taming Jungle Geology with Xtreme Seismic: An Integrated Study of the Amatique Basin, Guatemala**
B.E. Richter, US Capital Energy, Inc.; S.A. Haberman, Lago Petroleum Consulting, Inc.

Wednesday, 9 June • 1400-1530 hours
Conference Room 308
TECHNICAL SESSION 20: WELL TESTING

Session Chairpersons:
Suwat Athichanagorn, Chulalongkorn U.
Zheng Shi-Yi, Heriot-Watt U.

- | Time | Paper | |
|------|--------|---|
| 1400 | 131150 | Determining Multilayer Formation Properties from Transient Temperature and Pressure Measurements in Commingled Gas Wells
W. Sui, China U. of Petroleum Beijing; C. Ehlig-Economides, D. Zhu and A.D. Hill, Texas A&M U. |
| 1420 | 131294 | Extraction of Interference from Long-Term Transient Pressure using Multi-Well Deconvolution Algorithm for Well Test Analysis
S. Zheng and F. Wang, Heriot-Watt U. |
| 1440 | 131443 | A New Deliverability Testing Method for Gas Condensate Wells
J. Shi, X. Li, B. Li and J. Zhou, China U. of Petroleum Beijing; D. Shi, China Natl. Logging Corp.; H. Xu, Research Inst. of Petroleum Exploration & Development |
| 1500 | 130977 | Pressure Transient Analysis with a Dual Changing Wellbore Storage Model
I. Suzuki and M. Nomura, INPEX Corp. |

Alternates/Posters

- 131666 Pressure Transient Behavior for Stress-Dependent Fracture Permeability in Naturally Fractured Reservoirs**
Q. Tao, A. Ghassemi and C.A. Ehlig-Economides, Texas A&M U.
- 132271 Well Test Interpretation Model on Power-Law Non-Linear Percolation Pattern in Low-Permeability Reservoirs**
S. Liu, Xi'an Shiyou U.; R. Han, Shengli Oilfield Co.; K. Zhang, China U. of Petroleum (East); Z. Tang, Changqing Oilfield Co.

Wednesday, 9 June • 1600-1730 hours
Conference Room 302
TECHNICAL SESSION 21: SPECIAL SESSION FOR CNOOC

Session Chairperson:
Jiang Wei, CNOOC Ltd.

- | Time | Paper | |
|------|--------|---|
| 1600 | 136727 | Flexural Distortion Analysis of the Mandrel in an Orienting Rotary Steerable Drilling Tool
S. Jiang, China U. of Petroleum Beijing |
| 1620 | 136728 | Establishment of a Sand Production Prediction Model for Inclined Casing Perforated Well
S. Xie, Y. Ren and Z. Chen, CNOOC Energy Technology & Services-Oilfield Technology Services Co. |
| 1640 | 136730 | Research for Horizontal Well Reasonable Drawdown Pressure of Heavy Oil Reservoir with Bottom Water
T. Li, L. Ge, C. Zhao, Q. Yang, X. Liao, S. Chai, W. Qin, Y. Xu, K. Xiao and X. Bie, CNOOC Ltd. - Tianjin Branch |
| 1700 | 136731 | Time-lapse Seismic Study of South China Sea
Y. Xie, Z. Chen, J. Zhou, A. Gou, Y. Sun and W. Liu, CNOOC Ltd. – Zhanjiang Branch |

TECHNICAL PROGRAMME

Alternates/Posters

- 136732 An Effective Experience on Reducing the Power Consumption and Produced Water Drainage of Boxi Oilfields**
J. Yu, Z. Wen and L. Geng, CNOOC Ltd. - Tianjin Branch
- 136733 Pay Zone Protection during Drilling in Offshore Oilfield Producing with High Porosity, High Permeability and Low Pore Pressure**
W. Jiang, China Natl. Offshore Oil Corp.; J. Deng, X. Zhang, W. Tang, CNOOC Ltd. - Tianjin Branch; Z. Li and H. Miao, China Offshore Oil Service Ltd.
- 136734 Lessons Learned from a Well's Sand Control Failure in Bohai Bay**
S.H. Chen and R.Q. Xu, CNOOC Energy T&S Ltd.; J.M. Deng, B.T. Fan and B. Li, CNOOC Ltd.;

Wednesday, 9 June • 1600-1730 hours Conference Room 305A/B TECHNICAL SESSION 22: PRODUCTION ASSESSMENT AND PLANNING

Session Chairpersons:
David Clark, Baker Hughes Inc.
Kozo Sato, U. of Tokyo

- | Time | Paper | |
|------|--------|--|
| 1600 | 131215 | Seismic Acquisition Techniques for Loess Area in Western China
D. Li, J. Sun, K. Chen and X. Zhang, CNPC Chuangqing Drilling Engineering Co. Ltd. Sichuan / CCDC Sichuan Geophysical Co. |
| 1620 | 130008 | Upstream Oil and Gas Project Development Timing
S. Feng, PFC Energy |
| 1640 | 131477 | Geographical Information System Applications in EP Business
Y. Cheng, Shell China E&P Co. Ltd.; Z. Puasa and E. Endot, Sarawak Shell Bhd. |

Wednesday, 9 June • 1600-1730 hours Conference Room 305C TECHNICAL SESSION 23: INNOVATIVE COMPLETION TECHNIQUES

Session Chairperson:
Peng Shuangjiu, China Nanhai Magcobar Mud Corp. Ltd.

- | Time | Paper | |
|------|--------|--|
| 1600 | 130334 | DASS Well – A New Concept of Multiple Zone Well Completion
C. Dass, Oil & Natural Gas Corp. Ltd. |
| 1620 | 130490 | Applying Multi-Node Intelligent Well Technology for “Active” Control of Inflow Profile in Horizontal/Inclined Wells
K. Sun, Baker Hughes Inc.; B. Guo, U. of Louisiana at Lafayette ; Luigi Saputelli, Hess Corp. |
| 1640 | 132117 | Running Liners and Well Completion in Pressurised Mud Cap Drilling Mode in Indonesia
J.S. Toralde and K. Hillis, Weatherford |
| 1700 | 130984 | Successful Application of the Sand Removal Technique by Use of Concentric Tubing Jet Pump in Karamay Shallow Heavy Oil Horizontal Well
J. Wang, B. Xie, X. Luo, H. Zheng, and X. Ma, Oil Production Technology Research Inst. of Xinjiang Oilfield Company |

Alternate/Poster

- 130477 Effects of Shaped Charge Case Materials on Perforating Guns**
C. Han, M.H. Du, and B. Ference, Schlumberger

TECHNICAL PROGRAMME

Wednesday, 9 June • 1600-1730 hours
Conference Room 307
**TECHNICAL SESSION 24: HEAVY OIL -
EXPERIENCE IN NEW TECHNOLOGY**

Session Chairperson:
Li Yan, Chevron Corp.

Time	Paper
1600	131368 Improved Heavy Oil Recovery by CO₂ Injection Augmented with Chemicals Y. Zhang, Energy Resources Conservation Board of Alberta, Canada; P. Luo and S. Huang, Saskatchewan Research Council
1620	130850 Flow Regimes and Transition Characters of the high Viscosity Oil-Water Two Phase Flow W. Wang, Research Center of China Petroleum Pipeline Bureau (CPPLB), CNPC and China U. of Petroleum Beijing; J. Gong, China U. of Petroleum Beijing
1640	132247 Enhanced Heavy Oil Recovery from Fractured Vuggy Carbonated Reservoir of Tahe Oil Field with N₂/CO₂ Gas Mixture R.B. Zhao, W.Q. Ke, Y.H. Wu, and X.A. Yue, China U. of Petroleum Beijing; H.Y. Zhao, SINOPEC
1700	131449 Investigation of Foam Properties and its Action on Flow Improvement of Heavy Oil J. Jing and H. Zhu, Southwest Petroleum U.; Y. Li, No. 2 Production Plant of Changqing Oilfield; X. Yang, Loadmaster Universal Rigs, Inc.; Z. Zhang, SINOPEC; J. Yao, West Sichuan Drilling Co., CNPC

Alternates/Posters

- 130071 Asphaltene Precipitation Study during Natural Depletion at Reservoir Conditions**
S. Afshari, U. of Calgary; R. Kharrat & M.H. Ghazanfari, Tehran Petroleum Research Center
- 130758 Applications of Thermal Recovery and Waterflood Methods to Heavy and Extra-Heavy Oil Reservoirs : Analog Knowledge from More Than 120 Clastic Reservoirs**
X.G. Lu, S.Q. Sun and J. Xu, C&C Reservoirs

Wednesday, 9 June • 1600-1730 hours
Conference Room 308
TECHNICAL SESSION 25: RESERVOIR STUDIES

Session Chairpersons:
Vinit Hansamuit, PTT Exploration and Production Plc.
Paul F. Worthington, Gaffney, Cline & Assocs. (Consultants) Pte. Ltd.

Time	Paper
1600	130653 Integrated Geology, Geophysics and Petrophysics Data to Describe Lateral and Vertical Reservoir Heterogeneity to Optimise Field Development Plan, Limau Field, South Sumatra Basin, Indonesia S.B. Nugroho, R.N. Ardianto, and Y. Hartono, PERTAMINA EP
1620	132195 Ensuring Production in the Malaysian F6 Field Using Field Monitoring and Geomechanical Forecasting M. Davison, Sarawak Shell Bhd.; J.J. Ita, Shell Intl. E&P Co.; R.A. Hofmann, Shell Technology India Ltd; P. Seli, Shell
1640	130134 Medium-High Permeability Mature Reservoir Management Study: An Innovative Methodology and Case Study Z.P. Wang, IUT Group; X. Liu, SINOPEC; Y. Wang, Shengli Oilfield Inst.
1700	131952 New Formation Evaluation Parameters of Low Permeability Water Bearing Gas Reservoirs and its Application G. Zhu and X. Liu, RIPED, PetroChina Co. Ltd.; S. Miao, China Natl. Petroleum Corp.

Alternates/Posters

- 131017 Reservoir Characterisation of the Mio-Pliocene Reservoirs of PM301 in the North Malay Basin**
I. Abd Aziz, S. Carney, W. Martins, A. Low and J. Kennedy, Hess Oil & Gas Sdn. Bhd.
- 130508 Lithofacies Analysis and Modelling of the Kookfontein Deltaic Successions, Tanqua Depocenter, Southwest Karoo Basin, South Africa.**
W.A. Sonibare and D. Mikes, U. of Stellenbosch

TECHNICAL PROGRAMME

131210 Use of Elemental Capture Spectroscopy to Accurately Determine Reservoir Lithology and Porosity in High Pressure and High H₂S Environment
Z. Zhao and X. Tang, PetroChina Southwest Oil and Gas Co.;
D. Yu, D. Murray and H. Zhao, Schlumberger

131867 Implement Fine Redevelopment to Keep Oil Oilfield Sustainable Development – A Case from the T₂K₁ Reservoir of the Eastern District No. 1 Block of Karamay Oilfield
S. Yang, C. Xiao, J. Lin, S. Yuan and R. Wu, PetroChina Xinjiang Oilfield Co.

Thursday, 10 June • 0830-1000 hours
Conference Room 302
TECHNICAL SESSION 26: FIELD DEVELOPMENT 1

Session Chairpersons:
Effendy Cheng Abdullah, PETRONAS Carigali Sdn. Bhd.
Jeff Pan, Anadarko Petroleum Corp.

Time	Paper	
0830	129783	Modification of Capacitance-Resistive Model for Estimating Waterflood Performance H. Chen, Yangtze U.; Z. Zhang, SINOPEC, W. Sun, Peking U.; K. Li, Yangtze U. and Stanford U.
0850	130054	Using Optimisation Techniques for Determining Optimal Locations of Additional Oil Wells in South Rumaila Oil Field W.J. Al-Mudhafar Iraqi South Oil Co.; M.S. Al-Jawad, U. of Baghdad; D.A. Al-Shamma, Iraqi Ministry of Oil
0910	132125	Increasing Ultimate Oil Recovery by Infill Drilling and Converting Weak Production Wells to Injection Wells Using Streamline Simulation M. Sayyafzadeh and F. Rashidi, Amir-Kabir U. of Technology; P. Pourafshary, U. of Tehran
0930	131621	Application of Integrated Production and Reservoir Modelling to Optimise Deepwater Development R.F. Stoitsits and H.M. Bashagour, ExxonMobil; and C.G. Su, SPT Group

Alternates/Posters

131911 New Methods about the Productivity Contribution Evaluation and Development Features of Natural Fractures in Ultra-Low Permeability Reservoir
X. Ran, J. Zhao, S. Li and J. Fan, PetroChina Changqing Oilfield Co.

Thursday, 10 June • 0830-1000 hours
Conference Room 305A/B
TECHNICAL SESSION 27: NEW DEVELOPMENT IN DRILLING TOOLS

Session Chairpersons:
Liang Jin, Shell China E&P Co. Ltd.
Sun Mingxin, SINOPEC Shengli Drilling Technology Research Inst.

Time	Paper	
0830	131764	Friction Stir Welding: New Developments for Oil and Gas Industry R. Steel, Q. Liu, M. Collier, J. Peterson, and S. Packer, MegaStir Technologies; R. Rowland, Global Tubing
0850	131820	A Downhole Blowout Preventer with the Equipment of Pressure Measurement B. Gao, R. Chen, Z. Song, X. Li and Z. Mu, Drilling Technology Research Inst., CNPC
0910	130924	Successful Application of the New Double-Effect Protector in Deep Well Drilling X. Zhu, S. Liu, C. Shi, H. Tong and R. Nie, Southwest Petroleum U.
0930	130920	Design, Development and Testing of a Slimhole Rotary Steerable System S. Jones, J. Sugiura, and P. Das, PathFinder Energy Services

Alternates/Posters

130811 Method and Utility of Well Productivity Estimation during Drilling
L. Zhang, Peking U. and Y. Jalali, Schlumberger

131799 Drilling Technology of HTHP Ultradeep Well and the Crucial Technique Application
Z. Liu, Xibu Drilling Engineering Co. Ltd., CNPC

TECHNICAL PROGRAMME

- 131199 **Improvement and Application of Bowers' Velocity Effective-Stress Method in Pore Pressure Estimation**
R. Ji and H. Fan, China U. of Petroleum Beijing

Thursday, 10 June • 0830-1000 hours
Conference Room 305C
TECHNICAL SESSION 28: SAND CONTROL

Session Chairpersons:

Stan H. Tan, Weatherford Intl. Ltd.
Raymond Tibbles, Schlumberger

Time Paper

- 0830 130785 **Design, Execution, and Results of the Longest Multizone Cased-Hole Gravel Pack Completion in Malaysia**
S. Saebi, S. Tyutikov, A. Machado, C. Curteis, and M.E. Rivero, Schlumberger; M.Z. Khaled and M. S. Habib, PETRONAS Carigali Sdn. Bhd.
- 0850 132152 **Maximising Production Life with the use of Nanotechnology to Prevent fines Migration**
C. Belcher, K. Seth, and R. Hollier, Baker Hughes Inc.; B. Paternostro, LLOG Exploration Co. LLC
- 0910 127914 **Long-Term Production Results of High-Rate Water Packs - Case Histories from NanHai West Bay, South China Sea**
W. HaiMing, CNOOC; K. Wah, P. Nguyen, J. Fleming, and E. Lai, Halliburton
- 0930 131542 **Successful through Tubing Gravel Pack Unlocks Production in Mature Fields Offshore Brunei**
K. Shaikh, R. Adesegha, and N. Talib, Brunei Shell Petroleum Co. Sdn. Bhd.

Alternates/Posters

- 130559 **Evaluation of Sand Control Completion Alternatives and Asphaltene Deposition Treatments in the Area 2 Sur Field Maracaibo Lake Venezuela**
V. Vasquez C, PDVSA and Robert Gordon U.

- 131040 **Case Study: The Sand Management and Control Techniques for Complex Fault-Block Reservoir in Gangxi Oilfield**

J. Yan, China U. of Geosciences(Beijing) and RIPED, PetroChina, Y. Zhang, Daqing Petroleum Inst.; Y. Liu, C. Xiong, J. Liu, H. Xu, Research Inst. of Petroleum Exploration and Development, PetroChina, Q. Han, Dagang Production & Research Engineering Inst.

- 130199 **Strategies for Removal of Formate Brine Based Drill in Fluid (DIF) Filtercake in Gravel Packed Completions - A Laboratory Evaluation**
L. Salgaonkar, R. Ali, A. Danait, and S. Salahudin, Halliburton

Thursday, 10 June • 0830-1000 hours
Conference Room 307
TECHNICAL SESSION 29: NEW SIMULATION TECHNIQUES

Session Chairpersons:

Norio Arihara, Waseda U.
Sun Fujie, CNOOC Research Center

Time Paper

- 0830 131737 **Reduced-Variables Method for General-Purpose Compositional Reservoir Simulation**
H. Pan and H.A. Tchelepi, Stanford U.
- 0850 130728 **Accurate Fluid Interface Tracking of Interwell Tracer Flow by the Constrained Interpolation Profile Method**
T. Goda and K. Sato, U. of Tokyo
- 0910 129583 **Modelling Formation Damage due to Flocculated Asphaltene Deposition through Dynamic Displacement**
A. Rezaian, A. Kordestany, M. Jamialahmadi and J. Moghadasi, Petroleum U. of Technology Iran
- 0930 131668 **Approximate Simulation for Complex Reservoirs by Using Commercial Simulator**
X. Peng and Z. Du, Southwest Petroleum U.; B. Liang, Chevron ETC

TECHNICAL PROGRAMME

Alternates/Posters

131019 A Multi-Segment Multiphase Wellbore Model Associated with Dynamic Gridding

C.C. Dong, M. Bahonar, Z. Chen, and J. Azaiez, U. of Calgary

132072 Eliminating Subjectivity in History Match Evaluation through Systematic Data Mining and Application of History Match Quality Index

N. Darman, PETRONAS; T. Bui and J.C. Moreno, Schlumberger

132206 Novel Approach in the Development of Next Generation Numerical Reservoir Simulator

W. Liu and Z. Li, China U. of Geosciences; D. Han, Research Inst. Petroleum Exploration and Development, PetroChina; H. Jiang, China U. of Petroleum

Thursday, 10 June • 0830-1000 hours

Conference Room 308

TECHNICAL SESSION 30: MODELLING OF COMPLEX RESERVOIRS

Session Chairpersons:

Lim Min-Teong, Shell EP Intl. Ltd.

Qi Yuanchang, BP China

Time Paper

0830 131716 Evaluation of Oil Compressibility Effects on Pressure Maintenance in Naturally Fractured Reservoirs Using Streamline Simulation

S. Tanaka and N. Arihara, Waseda U.; M. Al-Marhoun, King Fahd U. of Petroleum and Minerals

0850 132236 An Efficient Upscaling Process Based on a Unified Fine-Scale Multi-Physics Model for Flow Simulation in Naturally Fracture Carbonate Karst Reservoirs

G. Qin, U. of Wyoming; L. Bi, P. Popov and Y. Efendiev, Texas A&M U.; M. Espedal, U. of Bergen, Norway

0910 131305 Fracture Modelling and Application Based on Fracture Mechanics

M. Tang and J. Zhang, Beijing Normal U.; X. Yu, Jilin Oilfield Co.

0930 131075 Comparison of Oil Displacement by Water between Naturally Fractured Reservoir and Vuggy Fractured Reservoir Based on Streamline Technique

Z. Zhang, Y. Hu, R. Fan and B. Li, Research Inst. of Petroleum Exploration and Development, PetroChina; S. Zhang, PetroChina E&P Co.

Alternates/Posters

130287 Discrete Fracture-Vug Network Model for Modelling Fluid Flow in Fractured Vuggy Porous Media

J. Yao, Z. Huang, Y. Li, C. Wang and X. Lv, China U. of Petroleum

132060 Subsurface Integration Leading to Improved History Matching: Case Study Using Malaysian Heterogeneous Carbonate Gas Field

A.H. Arsat, R. Masoudi, N. Darman, W.L. Liew, and M. Othman, PETRONAS

Thursday, 10 June • 1030-1200 hours

Convention Hall 2A

PANEL SESSION 3: OPPORTUNITIES AND CHALLENGES IN DEVELOPING OIL & GAS IN ASIA PACIFIC

Session Coordinator:

Li Qun, Director, Science and Technology Management Dept., CNPC

Session Chairperson:

Wu Qi, Vice President, PetroChina E&P Co.

Session Moderator:

Nasir Haji Darman, Custodian Engineer, Petroleum Resource Development, PMU, PETRONAS

Speakers:

- **Bagus Setiardi**, Corporate Senior Vice President Upstream, Upstream Directorate, PT PERTAMINA (Persero)
- **Ramlan Malek**, Vice President, Petroleum Management, PETRONAS
- **Carlton Robertson**, Executive Vice President, Operations, ConocoPhillips China Inc.
- **Luechai Wongsirasawad**, Executive Vice President, Human Resources & Business Services, PTT Exploration and Production Plc.
- **Ramsey Fahel**, President, Anadarko China
- **Yan Cunzhang**, President, Foreign Cooperation Admin. Dept., CNPC

TECHNICAL PROGRAMME

Thursday, 10 June • 1030-1200 hours
Conference Room 302
TECHNICAL SESSION 31: FIELD DEVELOPMENT 2

Session Chairpersons:
Joseph Koh, Schlumberger
Liu He, PetroChina Co. Ltd.

- | Time | Paper | |
|------|--------|---|
| 1030 | 131133 | Proactive Well Placement Integrated into a Systematical Approach Enhances Productivity in a Complex Offshore Field, Bohai Bay
C. Xian, B. Yang, R. Wang and M. H. Parlindungan / Schlumberger; P. Liu, Y. Zhao, L. Tan, J. Deng and G. Li, CCLT |
| 1050 | 132127 | Core Testing Provides an Engineered Approach to Underbalanced Drilling in Tight Gas Reservoirs
S.W. Nas and F. Yu, Weatherford |
| 1110 | 131950 | Integrated Static and Dynamic Study to Determine Optimal Infill Potential of a High Water-Cut Oilfield with Bottom Aquifer in Sudan
L. Zhao, X. Wu, Y. Liu, Bian Dezhi, Zhang Xinzheng and Li Wei, RIPED, PetroChina Co. Ltd. |
| 1130 | 132070 | Risk of Losing Oil Reserve by Gas-Cap Gas Production in Malaysian Thin Oil Rim Reservoirs
E.B. Razak, K. Chan and N.B. Darman, PETRONAS |

Alternates/Posters

- | | |
|--------|--|
| 130903 | A Study for Redevelopment Trends after Polymer Flooding and its Field Application in La-sa-xing Oilfield
D. Hu, Y. Chang and W. Tang, RIPED, PetroChina Co. Ltd.; Y. Wu, China National Petroleum Corporation; S. Hu, Southwest Petroleum U. |
| 131333 | Research on Development Rules and Strategies in the Low R/P Ratio of Tarim Major Sandstone Reservoirs
L. Yu, S. Zhang, Y. Chang, J. Yan and J. Feng, RIPED, PetroChina Co. Ltd.; J. Feng and Z. Lian, Petrochina Tarim Oilfield Co. |

- | | |
|--------|---|
| 131842 | Genesis and Prediction for Overpressure Carbonate Reservoir-Case Study of Kenkiyak Sub-Salt Carbonate Reservoir in Kazakhstan
Y. Chen, L. Zhao and Z. Fan, RIPED, PetroChina Co. Ltd. |
|--------|---|

Thursday, 10 June • 1030-1200 hours
Conference Room 305A/B
TECHNICAL SESSION 32: DRILLING CASE HISTORY AND BEST PRACTICE

Session Chairpersons:
Kok Kuang Thou, Halliburton
Sean (Xianping) Wu, Smith Technologies

- | Time | Paper | |
|------|--------|--|
| 1030 | 132204 | Building a Precise Mechanical Earth Model and its Application in Drilling Operation Optimisation: A Case Study of Asmari Formation in Mansuri Oil Field
S. Razi, Amirkabir U.; R.S. Shadizadeh, Petroleum U. of Technology Iran; E. Kazemzadeh, National Iranian Oil Co. |
| 1050 | 131481 | Optimising Performance in a Deepwater Environment: Gabon & Equatorial Guinea
P. Saicic, AGR Asia Pacific |
| 1110 | 130390 | An Integrated Application of Reducing Uncertainties for 3D Pore Pressure Prediction: A Case Study
Z. Ye, Rongyi Ji and H. Fan, China U. Of Petroleum |
| 1130 | 130822 | A New Approach for Casing Program Design with Pressure Uncertainties of Deepwater Exploration Wells
Z. Guan, China U. of Petroleum; B. Lu and K. Ke, SINOPEC Research Inst. of Petroleum Engineering. |

Alternate/Poster

- | | |
|--------|--|
| 132210 | The Design of Casing Used in Salt Layers in Gulf of Laizhou-China
Z. Li, Y. Lou and L. Zhu, Yangtze U.; C. Zhang, China Natl. Offshore Oil Corp. |
|--------|--|

TECHNICAL PROGRAMME

Thursday, 10 June • 1030-1200 hours
 Conference Room 305C
TECHNICAL SESSION 33: MODEL BASED TECHNOLOGIES

Session Chairpersons:

Li Gensheng, China U. of Petroleum Beijing

Zheng Ziqiong, Baker Hughes Inc.

Time	Paper	
1030	131349	Drilling Optimization Based on the ROP Model in One of the Iranian Oil Fields M. Mostofi, K. Shahbazi and H. Rahimzadeh, Petroleum U. of Technology; M. Rastegar, NIOC
1050	130421	Utility Calculation Method of New Four-Parameter Rheological Model for Drilling Hydraulics G. Wang and H. Fan, China U. of Petroleum Beijing
1110	130122	New Analytic Solutions for Pipe Helical Buckling Problems M. Teymoorishamasbi, G. Rashed and K. Salahshoor, Petroleum U. of Technology; M. Mohammadsalehi, Iranian Central Oilfields Company (ICOFC)
1130	OTC-20370	Dynamic BHA Modelling of Hole Enlargement While Drilling Leads to ROP Improvement in Gulf of Mexico M. Barrett, Shell; M.T. Compton, M. Agnihotri, F. Verano, S. Mitchell and D.L. Fitzmorris, Smith Intl.

Alternates/Posters

131253	Comparison of the Penetration Rate Models Using Field Data for One of the Gas Fields in Persian Gulf Area H. Rahimzadeh, M. Mostofi, A. Hashemi and K. Salahshoor, Petroleum U. of Technology
129592	A Drilling Rate Model for Roller Cone Bits and its Application G. Hareland, A. Wu and B. Rashidi, U. of Calgary
130095	Neural Networks in BHCP Prediction Performed Much Better Than Mechanistic Models R. Ashena, J. Moghadasi, M. Bataee, R. Ashena and A. Fegghi, Petroleum U of Technology-Tehran; A. Ghalambor, U. of Louisiana at Lafayette

Thursday, 10 June • 1030-1200 hours
 Conference Room 307
TECHNICAL SESSION 34: HEAVY OIL - STEAM INJECTION AND SAGD

Session Chairpersons:

Liu Huiqing, China U. of Petroleum Beijing

Wu Shuhong, PetroChina Co. Ltd.

Time	Paper	
1030	130948	Cyclic Preheating Test in SAGD Horizontal Wells of Liaohe Oilfield S. Peng, A. Yuan and H. Jiang, Drilling & Production Research Inst. of Liaohe Oilfield Co.; S. Zhang, Shuguang Oil Production Fac. of Liaohe Oilfield Co.
1050	130802	Drainage Mechanism of Steam with Solvent Co-Injection under Steam Assisted Gravity Drainage (SAGD) Process W. Li and D.D. Mamora, Texas A&M U.
1110	131061	Research and Application on CO₂ and Dissolver Assisted Horizontal Well Steam-Injection to Develop Super Heavy Oil H. Li, J. Sun and J. Shi, SINOPEC Shengli Oilfield Co.
1130	132185	Impact of Oil-Water Relative Permeability Curves on SAGD Behavior Q. Lei and I.D. Gates, U. of Calgary; J.J. Wang, Gushor Inc.

Alternates/Posters

130893	Uniform Steam Injection Technology Used in Thermal Horizontal Wells P. Gai, Y. Du, G. Lu, X. Li, Z. Luan and S. Li, SINOPEC Shengli Oilfield Branch Co.
130333	In Situ Upgrading Extra-Heavy Oil by Catalytic Aquathermolysis Treatment Using a New Catalyst based Anamphiphilic Molybdenum Chelate C. Wu, G. Lei, C. Yao and X. Jia, China U. of Petroleum
131942	Experimental and Simulation Studies of Steam Flooding Process in Shallow, Thin Extra-Heavy Oil Reservoirs C. Zan, D. Ma, H. Wang, X. Li, G. Jia, M. Li, RIPED, PetroChina Co. Ltd.

TECHNICAL PROGRAMME

Thursday, 10 June • 1030-1200 hours
Conference Room 308
**TECHNICAL SESSION 35: FRACTURED
RESERVOIRS**

Session Chairpersons:
Suwat Athichanagorn, Chulalongkorn U.
Younes Jalali, Schlumberger

- | Time | Paper | |
|------|--------|--|
| 1030 | 131571 | An Integrated Approach on Carbonate Reservoir Evaluation by Combining Borehole Image and NMR Logs - A Case Study in Ordovician Carbonate, East China
H. Hou, Schlumberger; H. Yun and Y. Xie, SINOPEC Shengli Oilfield Co. |
| 1050 | 130557 | Well Test Analysis of Multiple Matrix-to-Fracture Fluid Transfer in Fractured-Vuggy Reservoir
W. Djatmiko and V. Hansamuit, PTT Exploration and Production Plc. |
| 1110 | 130706 | A New Approach to Propagate Petrophysical Properties in a Fracture Network for Naturally Fractured Carbonate Reservoirs - Case Study: Icotea Fault Shear Zone, Cretaceous Formations at Maracaibo Lake, Venezuela
R. Soto Becerra, DigiOil Ltd.; S. Perez, D. Arteaga, and C. Martin Hidalgo, PDVSA Western Division |
| 1130 | 132241 | Integrated Fractured Reservoir Characterization and Connectivity Study in the Cantarell Field
A.V. Bustos, A.C. Eduardo, A. Febres, V.P. Antonio, PEMEX; F. Shen, GeoReservoir Research |

Alternates/Posters

- 131218 **Estimate of Permeability of Fracture Corridors/Networks: From Data Acquisition to Reservoir Simulations**
X. Zhang and N. Koutsabeloulis, Schlumberger Reservoir Geomechanics Centre of Excellence

- 130725 **Deriving Quantitative Fracture Properties from Whole Core Description: A Practical Link between Geological Observation and Flow Simulation**
J. Chen, Marathon Oil Corp.

Thursday, 10 June • 1400-1530 hours
Conference Room 302
**TECHNICAL SESSION 36: UNCONVENTIONAL
GAS RESOURCES**

Session Chairpersons:
Manabu Doi, Arabian Oil Co.
Liang Jin, Shell China E&P Co. Ltd.

- | Time | Paper | |
|------|--------|---|
| 1400 | 130369 | A Completions Roadmap to Shale-Play Development: A Review of Successful Approaches toward Shale-Play Stimulation in the Last Two Decades
K. Chong, B. Grieser, O.A. Jaripatke and A. Passman, Halliburton |
| 1420 | 131350 | From Oil-Prone Source Rock to Gas-Producing Shale Reservoir - Geologic and Petrophysical Characterization of Unconventional Shale-Gas Reservoirs
Q.R. Passey, K.M. Bohacs, W.L. Esch, R. Klimentidis and S. Sinha, ExxonMobil Upstream Research Co. |
| 1440 | 131862 | Well Spacing Optimization for Tight Sandstone Gas Reservoir
D. He, A. Jia, C. Jia, J. Guo, G. Ji, PetroChina Co. Ltd. |
| 1500 | 131583 | A Numerical Study of Transport and Storage Effects for Tight Gas and Shale Gas Reservoirs System
C.M. Freeman, D. Ilk and T.A. Blasingame, Texas A&M U.; G. Moridis, Lawrence Berkeley Natl. Laboratory |

TECHNICAL PROGRAMME

Thursday, 10 June • 1400-1530 hours
 Conference Room 305A/B
TECHNICAL SESSION 37: DEEPWATER: CUTTING TECHNOLOGY

Session Chairpersons:

Thomas Gee, Weatherford Intl. Ltd.

Jeff Pan, Anadarko Petroleum Corp.

Time	Paper
1400	130949 Simulations of Asphaltene Deposition in Submarine Pipelines by CFD H. Zhu, J. Jing and J. Chen, Southwest Petroleum U.; Q. Li and X. Yu, CNOOC Research Center
1420	132288 Deepwater Developments – Challenges from an Operator Point of View: The Essential Combination of Existing Field Experience with Innovation and New Technologies. E. Rambaldi and R. Mackenzie, Total
1440	131168 Choice of Landing String under Ultra-Deepwater Drilling Condition H. Zhang and D. Gao, China U. of Petroleum Beijing; H. Tang, CNOOC Ltd.
1500	132049 Deepwater Managed Pressure Drilling Applications S.W. Nas, Weatherford

Alternates/Posters

131594	A Dynamic Simulation Study of Water Hammer for Offshore Injection Wells to Provide Operation Guidelines Y. Tang and L. Ouyang, Chevron Energy Technology Co.
130270	Advantages of Inflatable Packer Technology for Temporary or Permanent Well Abandonment in the Gulf of Mexico. D. Vaucher and R. Brooks, TAM Intl., Inc.
131166	Natural Frequencies Analysis of Hyperstatic Integration Marine Drilling Riser W. Zhang and D. Gao, China U. of Petroleum Beijing

131618 Evaluation and Qualification of Materials for Subsea Insulation Systems

G. Ruschau, R.H. Rogers, S.A. Woodley and E.J. Wright, ExxonMobil Development Co.

131819 Scour and Deposit Analysis of Artificial Island in Nearshore Oilfield Development

S. Wang, Y. Qin and Z. Yao, Reseach Inst. Of Engineering, CNPC

Thursday, 10 June • 1400-1530 hours
 Conference Room 305C
TECHNICAL SESSION 38: DRILLING FLUIDS

Session Chairpersons:

Jiang Wei, CNOOC Ltd.

Yan Jienian, China U. of Petroleum Beijing

Time	Paper
1400	132207 Changing the Safe Drilling Window with Invert Emulsion Drilling Fluids: Advanced Wellbore Stability Modeling Using Experimental Results T. Hemphill, Halliburton; Y.N. Abousleiman, V.X. Nguyen, M.H. Tran and S. Hoang, PoroMechnics Inst., U. of Oklahoma; W. Duran, Saudi Aramco
1420	130717 Mud Weight Design for Deviated Wells in Shallow Loose Sand Reservoirs with 3D FEM X. Shen and S. Sikaneta, Halliburton; J. Ramadhin, Staatsolie
1440	131932 A New Method to Describe the Formation Framework of the Volcanic Gas Reservoir Hierarchically L. Yan, Q. Ran and Y. Hu, RIPED, PetroChina Co. Ltd.
1500	131189 Application of Super High Density Drilling Fluid Under Ultra-High Temperature on Well Shengke-1 Y. Xue, G. Li, B. Liu and J. Zhang, Drilling Research Inst. of Shengli Oilfield, SINOPEC

TECHNICAL PROGRAMME

Alternates/Posters

- 130959 Design of Water-based Drilling Fluids for an Extended Reach Well with a Horizontal Displacement of 8000m Located in Lihua Oilfield**
J. Yan, J. Geng, Z. Li and D. Gao , China U. of Petroleum Beijing; S. Zhao, IPEPC, SINOPEC.; J. Wang, CNPC Drilling Research Inst.
- 130341 Minimizing Wellbore Damage in a Sandstone Reservoir Using Effective Mud Management Practices**
M. Mohamed, Halliburton; A. Rabaa, J.E. Phillips and S.M. Al-Ammari, Saudi Aramco
- 130961 Mechanisms and Prevention of Damage for Formations with Low-porosity and Low-permeability**
J. Geng, J. Yan , Z. Li and Z. He, China U. of Petroleum Beijing.

Thursday, 10 June • 1400-1500 hours
Conference Room 307
TECHNICAL SESSION 39: BEST OF SEG

Session Chairperson:
Jie Zhang, GeoTomo
Sam Sun, China Petroleum University, Beijing

Time

- 1400 A Migration Correction Approach to Time-to-Depth Conversion of Velocity**
L. Zhang and H. Liu, Key Laboratory of Petroleum Geophysics, Inst. of Geology and Geophysics, Chinese Academy of Sciences
- 1420 Application of 2-D Deformable-Layer Tomostatics in Western China**
P. Li, Z. Yan and Y. He, BGP; H. Zhou, H. Liu and F. Jiang, Texas Tech U.
- 1440 The Role of Acquisition Geometry and Components for Imaging Microseismicity**
Z. Zou and H. Zhou, Departments of Geosciences, Texas Tech U. and Tomographysic Earth System Imaging Center, China U. of Geosciences; F. Jiang and H. Liu, Tomographysic Earth System Imaging Center, China U. of Geosciences
- 1500 Overview of Seismic Interferometry and Applications in Applied Seismology**
G. Schuster, U. of Utah

Thursday, 10 June • 1400-1530 hours
Conference Room 308
TECHNICAL SESSION 40: IOR/EOR 1

Session Chairpersons:
Hemanta K. Sarma, The Petroleum Inst.
D.M. Anwar Raja Ibrahim, PetroMalaysia Sdn. Bhd.

- | Time | Paper | |
|------|--------|---|
| 1400 | 130593 | Improved Production Strategy for Enhancing the Immiscible and Miscible CO₂-Assisted Gravity Drainage Oil Recovery
P.S. Jadhawar, U. of Adelaide and H.K. Sarma, The Petroleum Inst., UAE |
| 1420 | 131003 | Use of CO₂ Containing Impurities for Miscible Enhanced Oil Recovery
J.R. Wilkinson, A. Leahy-Dios, G.F. Teletzke and J.L. Dickson, ExxonMobil Upstream Research Co. |
| 1440 | 131087 | Feasibility Study of Air Injection for IOR in Low Permeability Oil Reservoirs of XinJiang Oilfield China
S. Hou, S. Ren, W. Wang and B. Niu, China U. of Petroleum; H. Yu, SINOPEC; H. Gu, Xinjiang Oilfield Co.Ltd, PetroChina |
| 1500 | 130726 | Recent Developments and Updated Screening Criteria of Enhanced Oil Recovery Techniques
A. Al-Adasani, Kuwait Oil Co.; B. Bai, Missouri U. of Science & Technology |

Alternates/Posters

- 131261 Experimental Study of Hydraulic Fracturing Caused by Polymer Injection in Unconsolidated Heavy Oil Reservoirs**
J. Zhou, Y. Dong ,Delft U. of Technology; C.J. Pater, StrataGen, Delft; P.L. Zitha, Shell Intl. E &P ,Rijswijk
- 130357 Preparation of Microgel Nanospheres and Their Application in EOR**
L. Wang, G. Zhang, J. Ge, G. Li ,J. Zhang, B. Ding, China U. of Petroleum

TECHNICAL PROGRAMME

Thursday, 10 June • 1600-1730 hours

Conference Room 302

TECHNICAL SESSION 41: UNCONVENTIONAL - EMERGING RESOURCES

Session Chairperson:

George Moridis, Lawrence Berkeley Natl. Laboratory

Time Paper

- 1600 132155 Analysis of Production Data for 2007/2008 Mallik Gas Hydrate Production Tests in Canada**
M. Kurihara, A. Sato, K. Funatsu and H. Ouchi, Japan Oil Engineering Co.; K. Yamamoto, Japan Oil, Gas & Metals Natl. Corp.; M. Numasawa, Japan Petroleum Exploration Co. Ltd.; T. Ebinuma and H. Narita, Natl. Inst. of Advanced Industrial Science and Technology; Y. Masuda, U. of Tokyo; S.R. Dallimore and F. Wright, Geological Survey Canada; D. Ashford, Consultant
- 1620 131151 Evaluation of Alternative Horizontal Well Designs for Gas Production from Hydrate Deposits in the Shenhu Area, South China Sea**
K. Zhang, G.J. Moridis and M.T. Reagan, Lawrence Berkeley Natl. Laboratory; N. Wu and X. Li, Guangzhou Center for Gas Hydrate Research, CAS
- 11640 131160 The Use of Huff and Puff Method in a Single Horizontal Well in Gas Production from Marine Gas Hydrate Deposits in the Shenhu Area of the South China Sea**
G. Li and X. Li, Guangzhou Inst. Of Energy Conversion, CAS; G.J. Moridis and K. Zhang, Lawrence Berkeley Natl. Laboratory
- 1700 131812 Hydrate Formation Conditions of Natural Gas with High Content of Carbon Dioxide and the Calculation Model**
R. Sun, S. Yu and S. Wang, PetroChina Jilin Oilfield Co.; C. Li, O. San and E. Liu, Southwest Petroleum U.

Alternate/Poster

- 131016 Numerical Simulation Studies of Gas Production from Natural Hydrate Accumulations Using Depressurize Technology**
B. Dou, G. Jiang, M. Qin, X. Wu and H. Gao, China U. of Geosciences

Thursday, 10 June • 1600-1730 hours

Conference Room 305A/B

TECHNICAL SESSION 42: WELL LIFTING AND PRODUCTION LOGGING

Session Chairpersons:

Sean (Xianping) Wu, Smith Technologies

Ding Zhu, Texas A&M U.

Time Paper

- 1600 130354 When Should We Run Production Logging Tool?**
K. Jongkittinarukorn and T. Kitcharoen, Chevron Thailand Exploration & Production Co.
- 1620 131467 Adaptive Analysis of Lifting Technology for Horizontal Wellbore in Low Permeability Oil Field**
H. Wang, B. Shen, D. Ge, T. Wang, B. Zhang, Y. Cao, Daqing Oilfield Co.
- 11640 132179 Successful Extended Reach Approach in Production Logging Applications**
A.A. El Kady, A.A. Al Ghafly, H.A. Al Khalifah, Saudi Aramco; T.A. Green and T.T. Ramsey, BJ Services Co.; S. Smith, Baker Hughes Inc.
- 1700 132220 A Case Study: Profiling Gas Production in the Tubing/Casing Annulus, Using Noise/Temperature Logging Techniques**
M.M. Molenaar, Shell Canada Ltd; B.M. Cowan and D.A. Cuthill, Weatherford; E. Fidan, Shell Intl. Exploration & Production, Inc.

Alternates/Posters

- 131437 Profile Controlling by Horizontal Well Completion Strings with Inner-Located Nozzle**
L. Li, H. Liu, H. Zhang and Qing Wang, China U. of Petroleum (Beijing)
- 131760 Challenges of Using Electrical Submersible Pump (ESP) in High Free Gas Applications**
A.S. Bagci, M. Kece and J. Nava, Eclipse Petroleum Technology Ltd.

TECHNICAL PROGRAMME

Thursday, 10 June • 1600-1730 hours
Conference Room 305C
TECHNICAL SESSION 43: MPD/UBD

Session Chairpersons:

Jiang Wei, China Natl. Offshore Oil Corp. (CNOOC)
Sun Mingxin, SINOPEC Shengli Drilling Technology Research Inst.

Time	Paper	
1600	131844	New Development and Application of Underbalanced Drilling Technology in China: A Critical Review R. Cheng, H. Wang, Y. Ge, M. Cui, CNPC Drilling Research Inst.; G. Ma and H. Fei, Oil Production Research Inst. of Daqing Oilfield Co .Ltd.
1620	132048	Deep Air Drilling Application to Enhance Rate of Penetration in Extremely Hard, Abrasive and High Temperature Environment S.W. Nas and D. Gala, Weatherford; P. Cox, Smith Intl.
11640	132116	Drillpipe Conveyed Logging Provides Solutions for Pressurized Mud Cap Drilling Operations J.S. Toralde, K.M. Fisher, D.J. Collecott, J. Stewart and D. Broyer, Weatherford
1700	131968	UBD Brings about a Big Breakthrough for the Exploration of Algeria Block 350 C. Cheng, Z. Zhou and J. Zhang, CNODC; B. Dong, RIPED; J. Ma, Q. Li, G. Wei, M. Ma, C. Zhang, CNPCIAE

Alternates/Posters

131846	Detailed Hydraulic Simulation of MPD Operation in Narrow Pressure Windows L. Cui, H. Wang and Y. Ge, China Natl. Petroleum Corp.
130711	Potential Implementation of Underbalanced Drilling Technique in Egyptian Oil Fields K.A. Fattah, KSU; A.A. Dahab and S.M. EL-Katatney, Cairo U.
130517	Development of Downhole Explosion Monitoring System for Gas Drilling K. Lan and S. Hou, Zhongyuan Drilling Engineering Technology Inst.; J. Gong, Huazhong U. of Science and Technology

Thursday, 10 June • 1600-1730 hours
Conference Room 307
TECHNICAL SESSION 44: HEAVY OIL - CASE STUDIES

Session Chairperson:

Li Qun, China Natl. Petroleum Corp.

Time	Paper	
1600	130947	Research into Steam Overlay Pattern and Countermeasures for Block Du84 in Liaohe Oilfield A. Yuan, H. Ma, X. Yang, X. Zheng, Liaohe Oilfield Co., PetroChina
1620	131616	Experimental Research of Work of Different ESP Stages on the Viscous Fluids M. Mokhov and A. Tsunevskiy, Gubkin U.
11640	131224	EOR of Superheated Steam Injection in Shallow Heavy Oil Reservoir: A Case Study Y. Wu, D. Ma, S. Liu, H. Wang, RIPED, PetroChina Co. Ltd.; X. Zhao, Daqing Oilfield, PetroChina Co. Ltd.
1700	130302	Water Coning Model for Horizontal Wells in High Mobility Reservoir, West Kuwait K. Al-Enezi, O.P. Das, M. Aslam, R. Bahuguna and A.A. Latif, Kuwait Oil Co.

Alternates/Posters

131634	Parametric Design and Application of Jet Pumping in An Ultra-Deep Heavy Oil Reservoir S. Chen and D. Yang, U. of Regina; Q. Zhang, China U. of Petroleum; J. He, PetroChina Tarim Oilfield Co., CNPC
130968	Investigation of Steam Injection at Critical Condition and a Pilot Test in 119-52, Chao-601 X. Zhao, B. Wu, H. Bateer and Y. Qian, Daqing Oilfield, PetroChina Co. Ltd.; Y. Wu, RIPED, PetroChina Co. Ltd.; P. Gao, U. of Wyoming; H. Zhong, Daqing Petroleum Inst.

TECHNICAL PROGRAMME

- 131527 Thermal Recovery Technology Research and Application of Thin Heavy Oil Reservoir**
G. Wang, D. Jiang, H. Zhao, Y. Qu, Y. Chen, F. Qin, K. Shao, PetroChina Daqing Oilfield Co. Ltd.; Y. Li, Research Inst. of Production Engineering, PetroChina

Thursday, 10 June • 1600-1730 hours
Conference Room 308
TECHNICAL SESSION 45: IOR/EOR 2

Session Chairpersons:

Harry L. Chang, ChemorTech Intl., LLC
Hemanta K. Sarma, The Petroleum Inst.

- | Time | Paper | |
|-------|--------|--|
| 1600 | 132212 | Static and Dynamic Testing of Silicate Scale Inhibitors
J. Arensdorf, D. Hoster, D. McDougall and M. Yuan, Baker Hughes Inc. |
| 1620 | 131043 | Wettability Index of Carbonatic Reservoirs and EOR: Laboratory Study to Optimise Alkali and Surfactant Flooding
V. Bortolotti, P. Macini and F. Srisutiyachai, U. of Bologna |
| 11640 | 131829 | A Case Study of High-Pressure, Light-Oil Steam Flooding in A Low-Permeability Reservoir
S. Wu, Z. Zhang, Y. Wu and D. Shen, RIPED, PetroChina Co. Ltd.; Y. Qian, Daqing Oilfield Co.Ltd.; F. Qiao, Heavy Oil Co., PetroChina Liaohe Oilfield Co. |
| 1700 | 127728 | Integrating Production Analysis as a Plan of Pattern Selection for Chemical Flood Pilot Project in Limau Block
S.B. Nugroho, R.N. Ardianto and P. Yasa, PERTAMINA EP |

POSTER SESSION

1000-1600 hours, Tuesday, 8 June
0900-1730 hours, Wednesday, 9 June
0830-1730 hours, Thursday, 10 June
Lobby of Level 3

Posters will be on display throughout the conference.
Poster authors will make informal presentations during

Wednesday, 9 June
1000-1030 hours and 1530-1600 hours
Thursday, 10 June
1000-1030 hours and 1530-1600 hours

Conference delegates are encouraged to visit the Poster Presentations to meet authors in an informal and interactive environment to discuss various technical issues.

In addition to the Poster Presentations listed in each session, the following papers will be displayed as posters:

Drilling & Completions

- 131857 New Development on Expandable Casing Hole Liner and Expandable Open Hole Liner**
X. Gao, Y. Li, L. Zhang, W. Han, RIPED, PetroChina Co. Ltd.
- 131912 The Novel Model for the Invasion of Particles and the Filtrate of Drilling Fluids**
J. Wang, J. Sun, J. Feng and X. Tan, CNPC Drilling Research Inst.; L. Bai, Baker Hughes Drilling Fluids.
- 132071 Zhao Dong Drilling—A History of Innovation to Enable Continuous Improvement and Optimum Performance**
S. Low, Roc Oil Bohai; A.R. Mellor, R.P. Hill and R.G. Scott, Drilling Management Intl.

Production and Operations

- 130207 Simulation on the Water Controlling Performance of RPM in Hydraulic Fracturing of Low Permeability Reservoirs**
M. Luo, Q. Wen, H. Liu, J. Liu, and Z. Jia, China U. of Petroleum; H. Sun, Changqing Downhole Technology Operation Co., CNPC
- 131182 The Research and Application Of Ultra High Temperature Fracturing Technology for Glutenite Formations**
J. Guo and Y. Yue, Southwest Petroleum U.; M. Song, X. Li and Y. Lu, Shengli Oil Petroleum Administration

POSTER SESSION

Gas Matters

130965 Studies on Fracture-Identification of the Igneous Rock Reservoir by Well Logging

J. Wang and X. Zhao, China U. of Petroleum Beijing; H. Liu, Southwest Petroleum U.

131953 The Study of Development Mechanism and Characteristics for Kela 2 Abnormally High Pressure Gas Field

T. Jiang, W. Zhu, X. Xiao and H. Wang, PetroChina Tarim Oilfield Co.

132214 Coalbed Methane Cementing Best Practices - Indian Case History

H.G. Syed and S. Shaik, BJ Services Co.

130900 Reservoir Architecture Characterization: EOS-Based Downhole Fluid Analysis, Openhole Logs and Pressures Integration

C. Xian, J. Zuo and S. Haddad, Schlumberger; A. Berrim, ADMA-OPCO

131105 The Evolution and Effect of Information Application Technology about Oilfield Development of Shengli

Y. Yang, China U. of Geosciences Beijing and Shengli Oilfield Co. Ltd. SINOPEC; Y. Zhou, M. Zhang, Y. Sun, Shengli Oilfield Co. Ltd. SINOPEC

131494 The Refined-Control Vertical Fracturing Technology for Thin and Low Permeability Interbedded Reservoir

Y. Wang, C. Zhang, S. Deng, Y. Yu, R. Wang, W. Zhou and G. Gao, Daqing Oilfield Co. Ltd., PetroChina

131805 Mesoscopic Simulation of Rheology of Polymer Solution

X. Li, J. Song and J. Yuan, RIPED, PetroChina Co. Ltd.; Y. Dai, CNPC

131813 The Study of Fracture in Volcanic Reservoir

J. Fang, Guangzhou Inst. of Geochemistry, CAS and RIPED, PetroChina; C. Jia, Q. Ran, X. Zhou, G. Hui, RIPED, PetroChina

131883 Comprehensive Tapping Residual Oil Potential of Strong Water Drive Mature Oilfield in Southern American Rainfall Region

Y. Li, F. Jia and G. Wang, H. Chen, X. Zhu, RIPED, PetroChina Co. Ltd.

131890 Horizontal Well Production Technologies in the Thin-Bedded, Bottom-Water Reservoirs in Luliang Oilfield, China

J. Huo, G. Shi, J. Lu, L. Sang, J. Shi, J. Tan, PetroChina Xinjiang Oilfield Co.

131915 A New Approach for Rock Typing Used in One of the Iranian Carbonate Reservoir (A Case Study)

H.S. Jooybari, G.H. Mowazi, S.R. Jaber, NISOC

131970 Interfacial Mass Transfer Mechanism and Flooding Characteristics of Dead End Pore on Supercritical Carbon Dioxide

J. Qin and X. Chen, RIPED, CNPC; K. Zhang, CNPC and CAS

Management & Information, HSE

130416 Downhole Disposal of Black Water – Engineering Re-design

L. Deng, Jereh Oilfield Services Co. and China U. of Geosciences (Wuhan); P. Wang and K. Chen, Jereh Oilfield Services Co.

131424 Study on Operating Parameters of CO₂ Supercritical Pipelines

C. Li, X. Wu, W. Jia, E. Liu and K. Liao, Southwest Petroleum U.

Reservoirs Session

130212 Alternative Method to Determine Pore Volume Compressibility Attributable to Production-Induced Reservoir Compaction

M. Bai, X. Shen and G. Li, Halliburton

130455 Modeling and Optimization of Asphaltene Deposition in Porous Media Using Genetic Algorithm Technique

V. Hematfar and R. Kharrat, Petroleum U. of Technology; M.H. Ghazanfari and M.B. Bagheri, Sharif U. of Technology

130867 Applying Laboratory Validated EOS-Based Downhole Fluid Characterization to Delump Downhole Fluid Analysis Compositions for Reservoir Continuity Analysis

C. Khong, J. Zuo, O.C. Mullins, M.D. O'Keefe, A. Hausot, Schlumberger; S. Guo, J. Cai and H. Yang, CNOOC Zhanjiang Ltd.

POSTER SESSION

131998 Water Flood Regime Study of High Dip Reservoir with Narrow Oil Zone
J. Ye and J. Li, RIPED, PetroChina Co. Ltd.

132052 Study Damage of Rock and Evolvement of Porosity and Permeability under Hydraulic Fracture in Ji Lin Oilfield
W. Zhao, C. Ai, Z. Bu, Daqing Petroleum U.; C. Sun, Daqing Oilfield Co. Ltd.; C. Wang, Oilfield Engineering Research Inst., CNOOC

132002 Propellant-Assisted Perforating in Tight-Gas Reservoirs: Wireline Formation Tests Show Successful Stimulation

M.W. Van Galen, D.A. Cuthill and G.L. Peterson, Weatherford Canada Partnership; D. Bouwmeester, TAQA NORTH Ltd.

132180 Modeling Hydraulic Fracturing Induced Fracture Networks in Shale Gas Reservoirs as a Dual Porosity System

C. Du, X. Zhang, L. Zhan, H. Gu, B. Hay, K. Tushingham, Schlumberger

Unconventional Oil & Gas

131323 Practices of Formation Damage Control for Deep Fractured Tight Gas Reservoir in Western Sichuan Basin

Y. Kang and L. You, Southwest Petroleum U.; X. Xu and Z. Liao, SINOPEC Southwest Branch



EXPLORE A UNIVERSE OF KNOWLEDGE

Get the technical information you need, at the largest online technical library serving the oil and gas industry.

- Search more than 90,000 technical documents
- Discover specialized content covering historical and emerging technology
- Find full-text papers and articles from journals and conferences
- Purchase papers from multiple professional societies
- Subscription options available



A constellation of libraries. An astronomical number of papers. Stellar search results.