

AADE 2019 NATIONAL TECHNICAL CONFERENCE

April 9-10, 2019

Hilton Denver City Center, Denver, Colorado

DAY 1 – April 9, 2019

7:00 – 8:00	Breakfast sponsored by PIC Chemicals		
8:15 – 8:30	Opening Comments – Conference Chairs in Colorado A-F		
8:30 – 9:30	KEYNOTE – in Colorado A-F Kim McHugh, VP of Drilling and Completions, Chevron		
9:30 – 10:00	Break sponsored by Nalco Champion Exhibits and Student Posters Session Open		
Meeting Room	Colorado E&F	Colorado J-G	Colorado A-D
10:00 – 12:00	Data & Analytics I <i>Session Chairs: Carlos Cantu II, Anadarko</i>	Drilling Fluids I <i>Session Chairs: Shawn Lu, QMax and Ethan Peterson, M-I SWACO</i>	Bits & Downhole Tools <i>Session Chairs: Carl Corson, BHGE and John Dennis, Halliburton</i>
10:00 – 10:30	Algorithm Automates Early Event Detection Leading to Reduced Drilling Risk and NPT - Lawrence Herskowitz (Halliburton). #011	High Temperature Coil Tubing Drilling Fluid - Balakrishnan P., Cedric Manzolelua and Edward Derkach (M-I SWACO, a Schlumberger company). #096	A Weight-on-Bit Self-Adjusting Dual-Diameter Bit and Its Indoor Experiments Analysis - Huaigang Hu and Roman Shor (University of Calgary); Zhichuan Guan, Bin Wang, Yuqiang Xu, and Deyang Liang (China University of Petroleum - East China). #072
10:30 – 11:00	Finding the Optimum BHA through Data Analytics and Modeling - Stephane Menand and Mahmoud Farrag (DrillScan). #078	A Comparison of the Wellbore Strengthening Attributes between Conventional and Highly Resilient Graphite: New Data to Support the Utility of Low Resilience Graphite as a More Effective LCM - J.D. Moffitt and Albert Tamashausky (Asbury Carbons). #043	High-Frequency Torsional Oscillation Study with a Motor-Assist Push-the-Bit Rotary-Steerable System and Multiple High-Frequency (800-1600 Hz) Drilling Dynamics Recorders in North American Land - Junichi Sugiura and Steve Jones (Sanvean Technologies). #097
11:00 – 11:30	Consistency Wins the Race – Demonstrating Unparalleled Consistency Through Automation and Objective Visibility into Drilling Operations - Stuart Ross, Ariel Torre and Duane Cuku (Precision Drilling). #089	Formate Fluid Design, Testing and Modeling for Slim-Hole and Coiled Tubing Operations - Siv Howard (Cabot); Eric van Oort (The Univ of Texas at Austin). #111	Data Density: Maximizing the Benefits of Downhole Survey Technology - Adrian Ledroz and Chris Hartley (Gyrodata). #101

11:30 – 12:00	Artificial Intelligence Approach to Predict Fracture Pressure - Abdulmalek Ahmed (King Fahd University of Petroleum & Minerals). #061	Enhancing Environmental Performance with Base Fluid Chemistry Selection and Bioremediation Management Techniques for Onshore Applications - John Candler, David Palmer, and Patrick Tyczynski (M-I SWACO, a Schlumberger company). #109	Real-Time Alkene Detection and XRF While Drilling to Monitor the Efficiency of PDC Drill Bits in US Land Tight Rocks: A Case Study - Barzin Chiniwala, Isaac Easow and Matt Regan (Geolog). #104
12:00 – 1:15	LUNCH – in Colorado A-F Rich Frommer, President & CEO, Great Western Oil and Gas		
1:30 – 3:00	Data & Analytics II <i>Session Chairs: Charles Barlett and Micha Miller, Schlumberger</i>	Drilling Fluids II <i>Session Chairs: Dustin Barnes, Halliburton and Curt Watson, Reliable Drilling Fluids</i>	
1:30 – 2:00	In-Field Assessment on the Impact of Electronic Composition Measurements for the Accurate & Consistent Measurement of Drilling Fluid Properties - John Large (Salunda). #108	A Practical Method to Calculate Yield Stress - Richard Baxter, Matthew Offenbacher and Juan Sanz (AES Drilling Fluids). #048	Student presentations
2:00 – 2:30	Neural Network Application to Manage Drill Stem Vibrations and Improve Drilling Performance - Mohammed Al Dushaishi (Texas A&M International University); Ahmad Aladasani (Consultant); Qutaiba Okasha (Kuwait Oil Company); Mortadha Alsaba (Australian College of Kuwait). #068	Direct Emulsion Drilling Fluid System Reduces Overall Drilling Cost - Katherine Price (M-I SWACO, a Schlumberger company). #106	
2:30 – 3:00	Geomechanical Properties from Drilling Data to Optimize Stimulation Design - Mazeda Tahmeen and John Hayes (Rocsol Technologies); Alexandra Cedola and Geir Hareland (Oklahoma State University). #036	A Comprehensive Study of Lubricant Performance in Brines and Water-Based Drilling Fluids - Junhao Zhou and Shawn Lu (QMax); Christof D'Hont and Michel Janssen (Oleon). #005	
3:00 – 3:30	Break Exhibits and Student Posters Session Open		

3:30 – 5:00	Software & Modeling <i>Session Chairs: Simon Fleury, Schlumberger and Dale Hopwood, Halliburton</i>	Lost Circulation <i>Session Chairs: Shawn Lu, QMax and Matt Hudson, Schlumberger</i>	
3:30 – 4:00	Predicting Downhole Spacer Contamination in Wellbore Displacements - Vitor Lopes Pereira and Dale Jamison (Halliburton). #025	The Application and Dichotomy of Lost Circulation Material in Prolific and Troublesome Middle East Formations - Mark Luyster, Kim Tresco and Craig White (TBC-Brinadd); Ahmed Amer (Newpark). #103	Student presentations
4:00 – 4:30	Modeling the Effect of Axial Oscillation Tools in Torque and Drag Computations - Mohamed Mahjoub, Stephane Menand, and Ngoc-Ha Dao (DrillScan). #095	Shear Activated Lost Circulation System - Aaron Blue, Clint Falgout, and Joshua Sheldon (M-I SWACO, a Schlumberger company). #093	
4:30 – 5:00	CFD Analysis and Model Comparisons of Circulating Temperature During Cementing Job - Yanfang Wang (Louisiana State University); Hu Dai (Pegasus Vertex). #004	Addressing the Challenges of Lost Circulation - Ahmed Amer (Newpark); Arthur Hale (Aramco). #056	
5:00 -	RECEPTION sponsored by Oleon Americas, TTS Drilling Solutions, Varel Oil & Gas Drill Bits and Seidel Tech		

DAY 2 – April 10, 2019

7:00 – 8:00	Breakfast sponsored by Wild Well Control		
8:00 – 10:00	Automation <i>Session Chairs: Andrew Macleod, NOV and Amanda Colyer, Helmerich and Payne</i>	Cementing & Zonal Isolation <i>Session Chairs: Dale Hopwood, Halliburton and Matt Hudson, Schlumberger</i>	
8:00 – 8:30	Fully Automated Directional Drilling for Consistency and Improved Performance - Todd Benson and Bill Chmela (Motive Drilling Technologies). #081	Planning and Executing Foamed Cement System in Oklahoma Allows for Full Wellbore Cement Coverage under Total Lost Circulation Situation and Provides for Enhanced Mechanical Properties of the Sealant – Hunter Rains and Trent Scaggs (Red Bluff Resources); Farzad Tahmourpour (C&J Energy Services). #112	Student Interactive with Industry
8:30 – 9:00	Improvements in Slide Quality and Speed Through Automation - Scott Coffey and Austin Groover (Nabors). #071	A Fit-For-Purpose Expandable Sealant for Demanding CO₂ Conformance Applications - Michael McDonald (PQ Corporation); Brett Cramer (BYK USA); Kelly Soucy (Magnum Cementing Services). #084	
9:00 – 9:30	MPD Meets Process Automation to Optimize Drilling Performance - Svein Hovland (NOV). #094	Micronized Weighting Agents for Ultra-High-Density Oil Well Cementing and Spacer Fluids - Ben Wang, Martin Urraca, Tarek Fattah, and Mohamed Al-Bagoury (Elkem). #027	
9:30 – 10:00	Semi-Automatic Drilling Fluid Property Measurement Device - Jovani Contreras (M-I SWACO, a Schlumberger Company). #107	A Low-Cost Nanoadditive to Enhance Cement Sheath Durability - Maryam Tabatabaei and Arash Dahi Taleghani (Pennsylvania State University). #042	

10:00 – 10:30	Break Exhibits and Student Posters Session Open		
10:30 – 12:00	New Methodologies <i>Session Chairs: David Wilcox and Jack Wiener, Halliburton</i>	Tubulars <i>Session Chairs: Mike Weber and Mollye Hinds, Tenaris</i>	
10:30 – 11:00	Hybrid Separation Technology Combines Advanced Solids Control with Waste Treatment Capabilities in a Single, Compact System to Reduce Costs and Improve Fluid Performance - Rajesh Kapila and Derek Mackay (Halliburton). #040	Data Analytics and Machine Learning in the Casing and Tubular Running Services Industry - Brennan Domec and Marcus Savini (Franks International). #037	Student Interactive with HR Representatives
11:00 – 11:30	Advanced Magnetic Ranging and Gyroscopic Measurements for Complex Plug and Abandonment – Georgy Rassadkin, Douglas Ridgway, Jamie Dorey and Clinton Moss (Scientific Drilling International). #034	How Does Buckling Impact Drilling & Completion Performance in Unconventional Wells? - Stephane Menand and Mahmoud Farrag (DrillScan). #080	
11:30 – 12:00	What Causes Mudlogging Mud Gas Response to Vary? - William Donovan (Donovan Brothers). #050	API 5C3 Addendum and Casing Collapse Design - Jiang Wu (retired); Gefei Liu (Pegasus Vertex). #041	
12:00 – 1:15	LUNCH – Colorado A-F Awards Presentations Speaker: Mark Truax, Vice President, Pac/West “Coming to a Basin Near You”		
1:30 – 3:00	Panel – Colorado A-F		
3:00 – 3:30	Break		

3:30 – 5:30	Optimization <i>Session Chairs: Andrew Macloed, NOV and Jim Friedheim, M-I SWACO</i>	Directional & Extended Reach Drilling <i>Session Chairs: Meghan Paulson, K&M and Curtis Fleiscchacker, BHGE</i>	Well Design <i>Session Chairs: Mike Long, BHGE and Danielle Cook, H&P Technologies</i>
3:30 – 4:00	A New Approach to Increase the Initial Capacity and Improve the Decline Curve on Oil and Gas Wells - Lanne Houchin, Paul McElfresh, Joseph Conine, and Dorian Granizo (Production Improvement Consultants). #015	Overcoming Drilling Performance Limiters for Extended Horizontal Wells in the Permian Basin - Boris Castro and Timothy Moe (Baker Hughes GE). #110	Aging Platforms Revival in Gulf of Mexico: Addressing the Well Collision Risks - Vincent Osara and Alfred Tchagop (Schlumberger). #058
4:00 – 4:30	Case Study for Optimization of Bakken/Three Forks Drilling Program to Achieve Conventionally Drilled Three-Mile Lateral Wells - Paul Bitzan and Daniel Rice (Halliburton). #031	T&D Challenges Running Casing in Extended Reach Wells - John McCormick, Jinze Song, and Gefei Liu (Pegasus Vertex) #077	First Monobore Horizontal Drilling Success in Sublette County, WY - Randy Fletcher (Ultra Petroleum); Matthew Bechaver and Jeffrey Nash (Newpark). #044
4:30 – 5:00	Achieving "Peak" Drilling Performance Through Optimized Wellbore Hydraulics - Mark Ramsey (Texas Drilling Associates). #099	New Multi-Chamber Swab Valve Saves Time, Improves Safety on Unconventional Well - Austin Johnson (Downing); Tim Marvel (SEF Energy). #012	Improving Drilling Reliability Through Fast Time Domain Analysis - Raju Gandikota and Kaimin Yue (MindMesh). #016
5:00 – 5:30	Performance Improvements and Process Efficiencies from Simultaneous Operations Utilizing Dual Rig Design - Don Day (Marathon Oil Corporation); Chris Major, Jerry Prescott and Matthew MacDaniels (Helmerich & Payne). #019	The Super Lateral Campaign – Engineered Design Enables Drilling Beyond 30,000 ft - Steven Segrest (Eclipse Resources) and Matthew Offenbacher and Titus Robinson (AES Drilling Fluids). #046	Using Artificial Intelligence Method to Estimate Lost Circulation Events Prior to Drilling - Abo Taleb Al-Hameedi (Ministry of Oil Iraq); Ahmed S. Amer (Newpark). #022

Alternates

<p>Enhanced Mechanical Properties with Uintaite in Portland Cement - Dario Montes and Natalie Pascarella (American Gilsonite). #010</p>
<p>Polymers for Temperature Independent Viscosity - Christopher Cornetto and Richard Bennett (BYK USA, Inc). #013</p>
<p>Applications of Artificial Neural Networks in Petroleum Engineering- Part I: Prediction of Lost Circulation for Limestone Formations - Husam Alkinani and Shari Dunn-Norman (Missouri University of Science and Technology). #020</p>
<p>An Assessment of the Impact of Rheological Properties on Rate of Penetration Using Data Mining Techniques - Madhi Al-Maliki and Yousif Alshawi (Basra Oil Company). #023</p>
<p>Mixed Mineral Thixotrope Suspension Aid in Oil-based Drilling Fluids for ECD Management - Christopher Cornetto and Richard Bennett (BYK USA). #028</p>
<p>An Integrated Approach of Drilling and Completion Fluid Solutions and Facilities Drives Efficiencies in Gulf of Mexico Deepwater - Jake Komaromy, Matt Kratzer, Huan Du, Matt Miller, Leigh Gray and Sam Smith (Newpark). #035</p>
<p>Increased Efficiencies in the Montney Shale Following Hydraulics Modeling and Fluid Customization - Josh Phillips and Matthew Standley (Halliburton). #038</p>
<p>Degradation of Particulate LCM, the Thermal Influence - Changjun Zhou, David Hu and Carsten Wehling (Superior Graphite). #047</p>
<p>Review of the Applications of Artificial Intelligence in Petroleum Engineering with a Practical Example of Completion Methods Selection - Ahmed Alaabodi and Mohammed Bakir Ali (Western Michigan University). #055</p>
<p>Elasticity vs. Viscosity Influence on Proppant Carrying Suspension Properties in Shale Fracking Fluids – A Laboratory Testing Update. - Jose Guzman (Prime Eco Group). #064</p>
<p>New Cement Formulation Based on Nanoclay for Geologic Carbon Sequestration - Ahmed Abdulhamid Mahmoud and Salaheldin Elkattatny (King Fahd University of Petroleum & Minerals). #066</p>
<p>New Approach to Determine the Real Time Rheological Properties of High Over-Balanced Water-Based Drilling Fluid Using Artificial Intelligence - Salaheldin Elkattatny (King Fahd University of Petroleum & Minerals). #070</p>
<p>A Simplified Transient Flow Model for Riser Gas Handling in Non-Aqueous Muds with Time-Dependent Desorption Considerations - Nnamdi Nwaka, Yuanhang Chen, Syed Nahri, Louis Thibodeaux, Otto Santos, and Wesley Williams (Louisiana State University); #075</p>
<p>A Formulated Preflush – A Low--Cost Solution for Improved Cement Bonds - Michael McDonald and Guo Daoping (PQ Corporation); Kelly Soucy (Magnum Cementing Services).#082</p>
<p>Study of Rheology of Magnetorheological Fluids Under the Influence of a Magnetic Field and Its Potential Applications for Drilling Operations - John Estrada, Babak Akbari and Garrett Nielsen (Louisiana State University). #083</p>

A Novel Approach to Investigate Cement Pore Pressure During Hardening - Weicheng Zhang, Steven Hilgedick and Andreas Eckert (Missouri University of Science and Technology). #086

Wellbore Shielding Spacer System Technology Eases Pressure Gradient Uncertainty in Exploration Wells - Andy Jordan and Lucas Albrighton (BJ Services); David Kulakofsky (Impact Fluid Solutions). #090

DWOPs, CWOPs, WOWOPs, AWOPs for Fun and Profit! - Mark Ramsey (Texas Drilling Associates). #100

Experimental Evaluation of the Impact of Oil-Based Mud Residuals on Cement Bonding Strength - Livio Santos, Amwar Alghamdi, and Arash Dahi Taleghani (Pennsylvania State University). #102

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