

The background of the top half of the image features a large American flag on the left, a red-tinted image of an offshore oil rig on the right, and a blue digital network pattern at the bottom. The text "AMERICAN ASSOCIATION OF DRILLING ENGINEERS" is centered at the top in white, bold, sans-serif capital letters.

AMERICAN ASSOCIATION OF DRILLING ENGINEERS

Innovating to Secure America's Energy Future



2 0 2 3



NATIONAL TECHNICAL CONFERENCE AND EXHIBITION

4-5 April 2023 | Bush Convention Center | Midland, Texas

A large white five-pointed star graphic on a dark blue background, located in the bottom left corner.

www.aade.org

Aade
AMERICAN ASSOCIATION
of DRILLING ENGINEERS

We take energy forward



We're committed to making energy safer, cleaner, and more efficient for people and the planet. By combining industry-leading technologies and services with operations in over 120 countries, we're collaborating with customers to transform the future of energy—everywhere.

bakerhughes.com

Copyright 2022 Baker Hughes Company. All rights reserved.

Baker Hughes 

CONTENTS

3	Technical Program Overview
5	Speakers
6	Plenary Panel
8	Sessions Schedule Tuesday Morning April 4, 2023
9	Sessions Schedule Tuesday Afternoon April 4, 2023
10	Sessions Schedule Wednesday Morning April 5, 2023
11	Sessions Schedule Wednesday Afternoon April 5, 2023
13	Student Presentations
14	Conference Floorplan
16	Exhibitors
17	Exhibitors Booth Location

FROM THE CONFERENCE CHAIR

On behalf of the American Association of Drilling Engineers (AADE) Permian Basin Chapter and the National Board, we welcome you to Midland, Texas, and the 2023 National Technical Conference. 'Feel the Energy!'

The Permian Basin Chapter is elated to host and present the National Technical Conference this year for the first time. We have some amazing speakers and technical talks that we hope make this event the most worthwhile conference of the year. Innovation starts, tests, and thrives in the Permian Basin.

This growing area has new and young faces joining the ranks, adding fresh ideas to oil field operations. The importance of fresh ideas and innovation can be understated when looking at securing America's energy future. Energy is what powers the developed world. Oil and gas are still the leading source of that energy. Securing and efficiently producing this energy will ensure that America remains the leading energy provider.

The AADE National Technical Conference committee is appreciative to the sponsors and attendees for their participation. The success of our conference relies on dedication, enthusiasm, and positive vibes. We hope that everyone enjoys the technical insight, innovative thinking, and connections made at this conference.

Sincerely,



Mitchell Gipson
Conference Chair and Permian Basin Chapter President





Optimum
Performance
Through
Innovation

OPTIFIT
POWER SECTION STATORS

We know what it takes to power your drilling operations – to go faster, deeper and farther. It takes leading edge technologies like OPTIFIT. The latest engineering innovation in Abaco stator technology that delivers greater power section reliability with the maximized performance you demand.

abacodrilling.com/optifit

Abaco
DRILLING TECHNOLOGIES



MS Directional



Follow us on
LinkedIn

PERMIAN FOCUSED

59.2M+ FT Drilled in the Permian Basin

- *Mpact Proprietary Lower-End Designs*
- *+99% Mpact Lower-End Fleet Success*
- *Next Generation Power Sections*
- *Premium Motor Rentals*
- *Real-time RSS Communication*
- *Proprietary Surface & Downhole MWD Systems*

MORE DRILLIN' LESS TRIPPIN'



Scan QR for spec sheets



BEAST
WHEN ONLY THE TOUGHEST WILL DO



Tuesday, April 4

Registration booth opens at 7:00 AM

7:00 am – 8:00 am
8:15 am – 8:30 am

8:30 am – 9:30 am
10:00 am – 5:00 pm
12:00 pm – 1:15 pm
1.30 pm – 5:00 pm
5:00 pm – 7:00 pm

Breakfast

Welcome: Mitchell Gipson (Reliance Energy)
Cory Frederick (Fasken Oil and Ranch)

Keynote Speaker: Lori Blong | Co-Founder (Octane Energy)

Technical Sessions

Luncheon | Speaker: Peter Hennings | Senior Research Scientist (University of Texas)

Student Presentations in Ballroom B/C

Networking Reception

Wednesday, April 5

Registration booth opens at 7:00 AM

7:00 am – 8:00 am
8:00 am – 9:30 am
10:00 am – 4:30 pm
10:00 am – 12:00 pm
12:00 pm – 1:15 pm

3:00 pm – 3:30 pm

Breakfast

Plenary Panel: Exciting Innovations

Technical Sessions

Student Interactive with Industry and HR

Luncheon | Speaker: Eric van Oort | CEO (EVO Energy Consulting)

Student Awards

Afternoon Break Best Exhibitor Award



Boots on the ground

When we see a potential problem or slip in performance data, we put boots on the ground. We dispatch our Advanced Performance Management Team to the rig to determine the cause of the problem and implement a plan to fix it.

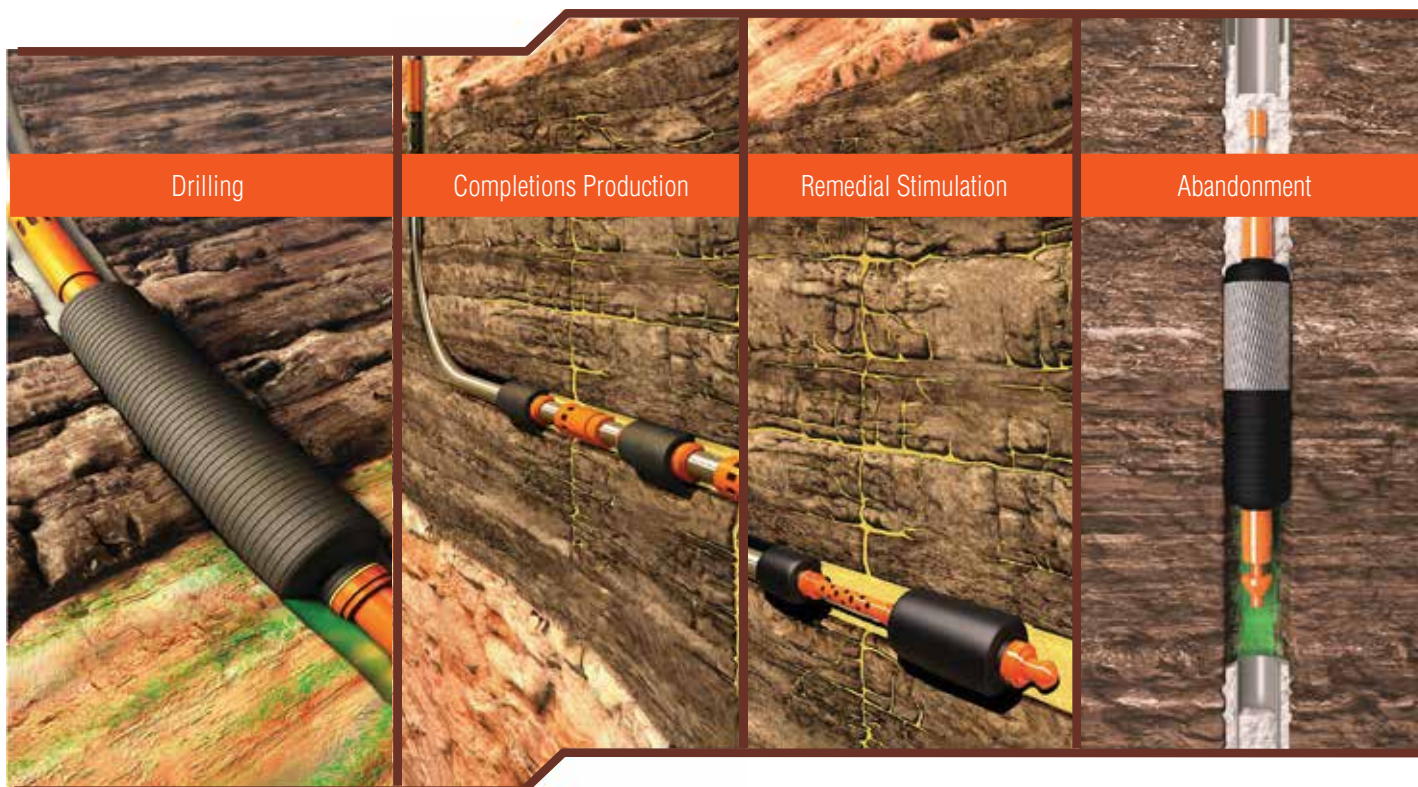
Experienced engineers, rig managers, drillers and crews. On the ground, when performance matters.



www.ensignenergy.com



TAM INTERNATIONAL



TAM INTERNATIONAL, INC.
FOR THE LIFECYCLE OF
YOUR WELL CONTACT
YOUR LOCAL
REPRESENTATIVE FOR
MORE INFORMATION
WWW.TAMINTL.COM

WELL CONSTRUCTION

For over half a century, TAM has provided solutions for the countless challenges operators encounter during the life cycle of a well. TAM's proven EPIC® solutions for drilling utilize our Swellable Packer, Casing Annulus Packer (VO Option), and Port Collar (VO Option) for cement integrity during primary, secondary and tertiary cementing operations. The versatile TIP & TAP effectively isolates lost circulation zones during drilling operations.

COMPLETIONS

Unique completion products include the FREECAP Swellable Packer. TAM's extensive suite of swellable packers are available in multiple elastomer compounds to fit the specific application.

INTERVENTION/STIMULATION/ABANDONMENT

TAM provides the exclusive TAM-J Multi-Set Inflatable Packer and the PosiFrac® Straddle System for multi-set, selective production testing, acid stimulation, and sand/fracture placement. The Inflatable Packers suite of tools can be used as production packers, bridge plugs, and scab liners. If P&A operations are needed, TAM's Inflatable Cement Retainer, TIP, TAP, and TAM-J packers provide reliable solutions.

WELL INTERVENTION

DRILLING & COMPLETIONS

UNCONVENTIONAL RESOURCES

RESERVOIR OPTIMIZATION

Excellence at the Wellsite®
www.tamintl.com



Tuesday 8:30 am – KEYNOTE SPEAKER

Leadership through Innovation and Change

Lori Blong

Co-Founder | Octane Energy

Lori Merritt Blong is a proud native of the Permian Basin and Co-Founder/Partner of Octane Energy, recognized by Inc. Magazine in 2017/18 as one of the Top 5 Fastest Growing private energy companies in Texas. Cofounded with her husband, Jared, in 2013, Octane provided project management and operational oversight for more than 600 wells a year, for more than 30 distinct operators across the Permian Basin and Oklahoma. In 2020, Lori stepped into the leadership role of Octane Energy, pivoting strongly into the E&P space to purchase a producing asset in Ector County. She also is a current city council member, serves on the board of the Permian Basin Petroleum Association, the board of Habitat for Humanity, as well as on Congressman Pfluger's Energy Task Force.



Tuesday 12:00 noon – LUNCHEON SPEAKER

Causes and Implications of Induced Seismicity in the Permian Basin

Dr. Peter Hennings

Senior Research Scientist | University of Texas Bureau of Economic Geology

Dr. Peter Hennings is Principal Investigator for the Center for Integrated Seismicity Research and a Lecturer in the Department of Geological Sciences. Prior to joining the Jackson School, Peter spent 25 years in the petroleum industry where he worked as a Research Scientist (Mobil Oil and Phillips Petroleum) and Research Manager (ConocoPhillips). Peter received his B.S. and M.S. degrees from Texas A&M University and his Ph.D. from The University of Texas. Peter's research specialty includes induced seismicity, structural geology, seismic structural analysis, reservoir geomechanics, and geology of West Texas and the Rocky Mountains. Peter has taught over 100 classroom and field courses at the professional, university undergrad, and graduate level on seismic structural analysis, fractured reservoirs, geomechanics, petroleum systems, induced seismicity, and field methods.



Wednesday 12:00 noon – LUNCHEON SPEAKER

Geothermal Drilling: Making or Breaking an Inexhaustible Source of Green Baseload Energy

Dr. Eric van Oort

CEO | EVO Energy Consulting

Dr. Eric van Oort became Professor in Petroleum Engineering and J.J. King Chair in Engineering at the University of Texas at Austin in 2012, after a 20-year industry career with Shell Oil Company. He holds a PhD degree in Chemical Physics from the University of Amsterdam. He has co-authored more than 200 technical papers, holds 16 patents, is a former SPE Distinguished Lecturer, a SPE Distinguished Member, and the 2017 winner of the prestigious international SPE Drilling Engineering Award. At UT Austin, he directs drilling-related R&D in two industry consortia (RAPID and CODA) with over 20 industry company sponsors, covering drilling automation & control, sensor design, big data analytics, complex well construction challenges, geothermal drilling, CCUS and well abandonment & decommissioning. In addition, he is the co-founder of 3 start-up companies, including SPYDR Automation dedicated to drilling automation and Ultradeep dedicated to dilution-based dual gradient drilling, and is the CEO of his own consulting company, EVO Energy Consulting.

EXCITING INNOVATIONS



Ryan Maynard | Moderator
Drilling Engineer | XTO Energy - ExxonMobil Subsidiary

Ryan has more than 10 years of experience in the oil and gas industry, starting his journey working over small vertical gas wells in the foothills of the Appalachian Mountains. He holds a BS in Petroleum & Natural Gas Engineering from West Virginia University. Ryan has worked as an MWD field engineer, drilling field engineer, drilling superintendent, and a drilling engineer; working mostly in the Eagleford and Permian Basin. Currently he is involved with supporting rigs in the Midland and Delaware Basins. He is also the 2nd VP and Program Chair of the Permian Basin AADE Chapter.



Rosario Jara
Remote Operations Engineer | XTO Energy - ExxonMobil Subsidiary

Drilling Fluid Automation for Real-World Applications

Rosario Jara has led the successful implementation of drilling fluid automation technology at XTO Energy. Her career began in research at ExxonMobil supporting a variety of disciplines including Heavy Oil and Mining, Flow Assurance, and most recently Drilling. She holds a BS in Chemistry and Masters Degree in Business Administration focused on upstream energy management. Currently she supports the ExxonMobil remote operations center located in Spring, Texas.



Price Maxwell
Senior Drilling Engineer | Oxy

Drilling Curves & Laterals with Rotary Steerables

Price Maxwell graduated from University of Texas in Austin in 2012 with a Bachelor of Science in Petroleum Engineering. He joined the Oil & Gas industry in 2012 with Schlumberger, working in field as an MWD/DD and in the office as a Drilling Engineer. Price Maxwell then joined Oxy in 2018, where he has worked as a Drilling Engineer in the Permian Delaware Basin Business Unit.



Ross Murphy
Vice President – Drilling Execution Manager | BPx, a subsidiary of BP

What Will You Know Tomorrow?

Ross Murphy is a 1977 graduate of Texas Tech University with a BS in Petroleum Engineering. His career started with Amoco in Wyoming and quickly moved across several companies and then to several countries. He has worked in 20 countries outside the US including Canada, Egypt, Kazakhstan and many others. The bulk of his career has been spent in drilling and completions with a stint as a drilling contractor as well. Ross has served on many SPE and IADC committees and in different roles. He has managed drilling programs of up to 26 rigs and corresponding completions.

Perspective is powerful when drilling.
It's even better when it streams live.



Drilling Fluid Systems

WELLBORE INSIGHTS

Drillers are hitting record depths and facing increasing operational, financial and safety pressures. Fluid platforms that connect digital systems and technical experts are increasingly necessary to predict and prevent problems before they occur.

Halliburton Baroid is connecting its leading technical processes with newly developed chemistries to maximize your wellbore. Engineered fluid systems, such as **BaraShale™** and **BaraXcel™**, are revolutionizing how we manage the wellbore.

These systems connect with the BaraLogix™ digital platform to deliver previously unseen insights and predictable outcomes. Live data interacts with vast historical offset data, artificial intelligence, cloud-based software and in-field technical experts to help predict risks before they become problems. **HindSight^{29%}™** gives operators a secure platform to visualize their fluid performance.

Our versatile and adaptive fluids systems help manage risk, improve wellbore stability and enhance performance.

7:00 – 9:30 Conference Opening and Keynote Speaker	
7:00 – 8:00 Foyer	Breakfast Exhibits Open Sponsored by ReedHycalog 
8:15 – 8:30 Hall A	Welcome Conference Chairs: Mitchell Gipson (Reliance Energy) and Cory Frederick (Fasken Oil and Ranch)
8:30 – 9:30 Hall A	Keynote Lori Blong Co-Founder (Octane Energy) <i>Leadership through Innovation and Change</i>
9:30 – 10:00	Coffee Break Exhibits and Student Posters Open Sponsored by FORTA 
10:00 – 11:30 Morning Technical Sessions	
Hall E	Bits and Cutters Session Chairs: Cade Jackson (Deep Energy Specialists) and Brady Walters (Ulterra)
10:00 – 10:30	Overcoming Shock Loads to Improve Drilling Efficiencies: Case Studies of Bit and Cutter Designs that Drilled Chert Interbedded Lithologies and Dense Conglomerates – Prabhakaran Centala, Peter Wu, and Moustafa Saleh (NOV). [041]*
10:30 – 11:00	Improving PDC Bit Design: A Case Study for 17.5 mm PDC Cutters – Casey Kitagawa, Cameron Devers, and Josh Criswell (Taurex Drill Bits). [068]
11:00 – 11:30	PDC Corrosion Resistant Cutter Testing and Validation in the Permian – Greg Andreasen, Chad Conry, Ron Eyre, Fen Yu, Paul Higgins, Mike Siracki and Neil Chaney (SLB). [070]
Hall A	Cementing & Zonal Isolation Session Chairs: Ashok Santra (Aramco Americas) and Rafael Pino (Saudi Aramco)
10:00 – 10:30	Self-Healing Agent Enhanced by Calcium Ions in Cement Slurry to Achieve Self-Healing Cement in Adjustment Wells with High Water Cut – Lin Zhao and Lihui Zhen (China University of Petroleum - Beijing); Yaxin Liu (University of Tulsa); Haijuan Wang and Junhu Yang (SINOPEC Henan Oilfield Branch Company); Chunyu Wang (Nanjing Tech University). [028]
10:30 – 11:00	Assessment of CO2 Leak Rate through Cement Fractures Sealed by Nano Silica Gels – Olatunji Olayiwola, Vu Nguyen, Randy Andreas, Ning Liu, and Boyun Guo (University of Louisiana at Lafayette). [036]
11:00 – 11:30	Improved Primary Cement Job Design Methodology for Mitigation of Vent Gas Flow – Jeremy Downs and Landon Olson (Sanjel Energy Services); David Kulakofsky (Impact Fluid Solutions). [062]
Ballroom B/C	Permian & Delaware Basins Session Chairs: Jenaya Rohlfing (ConocoPhillips) and Ahmed Amer and Travis Vordick (Newpark)
10:00 – 10:30	Optimization of Spacer Train for Use on Wolfcamp D Production Strings – Jason Winegarden, Neal Johnson, Aida Conkey, James Conkey, and Otman Algadi (NexTier Completion Solutions). [004]
10:30 – 11:00	Novel Cement Composition Eliminates Water Flows on Intermediate Strings in Midland and Delaware Basins – Russel Roberts and Lynelle Martinez (Nine Energy Service); Casey Bristow, Fred Sabins, and Larry Watters (Riteks). [038]
11:00 – 11:30	The Road to a Cement Alternative for Plug & Abandonment of Low Temperature Wells in West Texas – Carl Harman (Satanta Oil); Michael McDonald and Paul Short (PQ). [054]
11:30 – 12:00	Networking Break Exhibits and Student Posters Open
12:00 -1:15 Hall A	Luncheon Award Presentation Speaker: Peter Hennings Senior Research Scientist (University of Texas Bureau of Economic Geology) <i>Causes and Implications of Induced Seismicity in the Permian Basin</i>



1:30 - 3:00	Early Afternoon Technical Sessions	
Hall E	Case Histories Session Chairs: Vince Salvo (Det Consulting) and Ryan Broglie (MB Energy)	
1:30 - 2:00	Improved Sustainability Through Treatment of High Rheology Due to Excessive Low Gravity Solids: A Case Study and Field Trial – Kerry Moore, James Klein, Alexandria Hernandez, and Shadaab Maghrabi (Ingevity); Nathen Sellers, Jason Bush, and Chris Pennington (Paragon). [009]	
2:00 - 2:30	A Novel and Sustainable Nonaqueous Insulating Packer Fluid – Shermin Akhtar and Balakrishnan Panamarathupalayam (SLB). [018]	
2:30 - 3:00	Tailored for Success: Reservoir Drill-In and Breaker Fluids Customization to Achieve Optimized Well Productivity – A Case Study – Brittany Granger, Nathan Tarver, and Nathan Emery (Newpark Resources); Brent Murphy (Creede Energy). [034]	
Hall A	Geothermal Applications Session Chairs: Pawilai Hallmark and Vance Smith (Newpark)	
1:30 - 2:00	High-Temperature Low-End Rheology Modifier Proves Effective in 15% NaCl Water-Based Drilling Fluid – Janine Shipman, Meng Lu, and Fuchen Liu (CNPC-USA); Richard Bennett and Neil Grant (BYK). [005]	
2:00 - 2:30	A Summary of Lessons Learned from European Geothermal Applications – Ahmed Amer, Vance Smith, Lucio Bussaglia, and Alessandro Cascone (Newpark Fluids Systems). [039]	
2:30 - 3:00	Simulation Study on Controlling Mud Coolers to Mitigate Fluid Loss in Drilling Geothermal Wells – Tan Nguyen (New Mexico Tech). [031]	
Ballroom B/C	Student Presentations	
3:00 - 3:30	Coffee Break Exhibits and Student Posters Open Sponsored by FORTA	
3:30 - 5:00	Late Afternoon Technical Sessions	
Hall E	Automation & AI Session Chairs: Will Dacus (ExxonMobil) and David Giffin (ConocoPhillips)	
3:30 - 4:00	A Systematic Approach for Wellbore Instability Using Core Samples for Limestone: A Case Study from the Ratawi Field, Iraq – Abo Taleb Al-Hameedi, Husam Alkinani, Shari Dunn-Norman, and Mustafa Al-Alwani (Missouri University of Science and Technology); Ahmed Amer (Newpark Technology Center). [020]	
4:00 - 4:30	A Bridge Too Far? Bridging the Gap Between Remote Operations and True Automation – David Lee and Justin Christofferson (Petroleum Co-Ordinators). [022]	
4:30 - 5:00	Using Shale Shaker AI Cuttings Load Classification to Assess Hole Cleaning and Wellbore Stability – Calvin Holt and Francois Ruel (DrillDocs). [010]	
Hall A	Fracturing Session Chairs: Arthur Hale (Aramco Americas) and Brittany Granger (Newpark)	
3:30 - 4:00	A Coupled Geomechanics-Reservoir Simulation Workflow to Estimate the Optimal Well-Spacing in the Wolfcamp Formation in Lea County – Dung Bui, Tan Nguyen, and Hyunsang Yoo (New Mexico Institute of Mining and Technology). [014]	
4:00 - 4:30	Identifying Lost-Circulation Zones from Shear Wave Slowness in Volve Field, North Sea using Machine Learning – S.M. Kholy and Hunjoo Lee (Oklahoma State University). [047]	
4:30 - 5:00	Refracturing Activities in the United States — How Much Do We Know So Far? – Faisal Shammam, Abo Taleb Al-Hameedi, Husam Alkinani, Shari Dunn-Norman, and Mustafa Al-Alwani (Missouri University of Science and Technology); Ahmed Amer (Newpark Technology Center). [026]	
Ballroom B/C	Student Presentations	
5:00 - 7:00	Networking Reception	
Foyer	Sponsored by Paragon ISG ProDirectional Ultrerra	  

* [xxx] refers to the AADE paper number. The full paper number is AADE-23-NTCE-xxx

7:00 – 8:00 Foyer	Breakfast Exhibits Open
8:00 – 9:30	Plenary Panel
Hall A	Exciting Innovations Moderator: Ryan Maynard Drilling Engineer (XTO Energy - a subsidiary of ExxonMobil) - Rosario Jara Remote Operations Engineer (XTO Energy - a subsidiary of ExxonMobil) - Price Maxwell Senior Drilling Engineer (Oxy) - Ross Murphy Drilling Execution Manager (BPx - a subsidiary of BP)
9:30 - 10:00	Coffee Break Exhibits and Student Posters Open Sponsored by Enventives  ENVENTIVES
10:00 – 12:00	Morning Technical Sessions
Hall E	Fluid Design & Concepts Session Chairs: Richard Toomes (AES Fluids) and Scott Laird (ExxonMobil)
10:00 – 10:30	Acid Soluble, Expandable Loss Circulation Material – Ashok Santra, Arthur Hale, Kenneth Johnson, and Nicolas Osorio (Aramco Services). [049]
10:30 – 11:00	Shale Organic Matter Interaction in Non-Aqueous Drilling Fluids – Shawn Lu (SciDev); Don Van Slyke (Shell); Buddy Wylie and Tom Wagner (Coterra Energy); Frank Zamora (Premier Corex). [027]
11:00 – 11:30	Use of Innovative Second-Generation Flat Rheology Fluid Ensures Successful Delivery of Narrow Margin, Directional Wells – Tulio Olivares and Fuad Ghazi (Saudi Aramco); Jacob Komaromy and Alessandro Cascone (Newpark Fluids Systems). [021]
11:30 – 12:00	Non-Newtonian Clogged Flows in Bifurcated Pipelines and Conduits – Jamie Chin and Michael McKinley (Stratamagnetic Software). [063]
Hall A	Digital Technologies Session Chairs: David Gibson (Gibson Reports) and Cade Jackson (Deep Energy Specialists)
10:00 – 10:30	Remote Frac Operations with Digital Solutions: A Permian Basin Case Study – Hunter Hart and Andrew Haines (Oxy). [015]
10:30 – 11:00	Use Case of Digital Technology Creating Value in Today's Oil & Gas Industry by Reducing Cost and Enhancing Drilling Performance – Ahmed Amer, Gabriel Azzarelli, Travis Vordick, Bill Alsobrook, and Fahad Zia (Newpark Fluids Systems). [044]
11:00 – 11:30	Digital Rock Lab Enables Application-Specific Three-Dimensional Cutter Development and Its Application in Haynesville Shale Lateral Drilling – Xiaoge Gan, Curtis Byrd, Yuri Burhan, Wiley Long, and Youhe Zhang (SLB). [065]
11:30 – 12:00	Introduction to API RP-78, Wellbore Surveying and Positioning – Jonathan Lightfoot and Will Tank (Oxy); Ben Coco (API). [073]
Ballroom B/C	Student Interactive
10:00 – 12:00	Student Interactive with Industry and HR Leaders Barry Thomas Lower 48 Career Technical Lead (ConocoPhillips) Taylor Hickman Drilling Engineer (ConocoPhillips)



Media-A/V Sponsor



Media-A/V Sponsor



Conference Bag Sponsor


Shell
GTL Fluids

Name Badge Sponsor



Media-A/V Sponsor


TURNCO

Media-A/V Sponsor


Command
Tubular Products

Bag Insert Sponsor

12:00 – 1:15 Hall A	Luncheon Awards Presentation Speaker: Eric van Oort CEO (EVO Energy Consulting) <i>Geothermal Drilling: Making or Breaking an Inexhaustible Source of Green Baseload Energy</i> Student Awards Presentation Sandy Purdy Award for Best University Student Presentation
1:30 - 3:00	Early Afternoon Technical Sessions
Hall E	Fluid Innovations Session Chairs: Tatiana Conn (SLB) and Jim Friedheim (Consultant)
1:30 – 2:00	Evaluation of Laboratory Performance Tests for Drilling Fluids – Dimitri Kharmov, Balakrishnan Panamarathupalayam, and Evgeny Barmatov (SLB). [012]
2:00 – 2:30	Nanotechnology Based Shale Inhibitors – Ashok Santra, Arthur Hale, and Nicolas Osorio (Aramco Services); Mohammad Arfaj, Jothibas Ramaswamy, and Rafael Pino (Saudi Aramco). [050]
2:30 – 3:00	Low-Viscosity, Direct-Emulsion Fluid Addresses Conventional Emulsion System Limitations – Jeremy Smith, Lynn Foster, and Dimitri Kharmov (SLB). [023]
Hall A	Sag & Fluid Optimization Session Chairs: Tan Nguyen (New Mexico Institute of Mining and Technology) and Nils Kaageson-Loe and Reza Ettehadi Osgouei (Baker Hughes)
1:30 – 2:00	New Technology of the Past: Optimizing Water-Based Drilling Fluid to Match Unconventional Drilling Challenges – Montana Farnum, Richard Toomes, and Matthew Offenbacher (AES Drilling Fluids). [071]
2:00 – 2:30	Innovative Lab Equipment Design for Evaluating Weight-Material Sag Under Downhole Temperature and Pressures To Optimize Drilling Fluid Formulations – Juan Pablo Jaimes, Seth Croy, Edward Derkach, Yeukayi Nenjerama, Steve Young, and Graham Smith (SLB). [016]
2:30 – 3:00	A Newly Developed High Performance WBM for Enhancing ROP and Minimizing Both ECD and Barite Sagging in Drilling Shaly Wolfcamp Formations – M. Metwally and T. Nguyen (New Mexico Institute of Mining and Technology); H. Wiggins (Chemplex Solvay); Mitchell Gipson (Reliance Energy). [030]
3:00 – 3:30	Coffee Break Exhibits and Student Posters Open Best Exhibitor Award Sponsored by Enventives
	
3:30 - 4:30	Late Afternoon Technical Sessions
Hall E	Supply Chain Session Chairs: Dimitri Kharmov and Lynn Foster (SLB)
3:30 – 4:00	Supply Chain Chaos: Securing Barite in the Aftermath of the Pandemic – Matthew Offenbacher and Lonnie Broussard (AES Drilling Fluids); Tom Eisenman (Superior Weighting Products). [024]
4:00 – 4:30	Improving Supply Chain Efficiencies in a Supply Crunch with Cross-Functional Collaboration – Tushar Chawla, Jordan Dickerson, Kassie Harris, Diogo Tourinho, and Flavio Vieira (Newpark Fluids Systems). [046]
Hall A	Tools Session Chairs: Dennis Collins (Baker Hughes) and Bryan Schilder (Endeavor Energy Resources)
3:30 – 4:00	Latch Type Surface Casing Mandrel – Tyler Blankemeyer, Matt Melton, and Arthuro Trejo (Downing). [058]
4:00 – 4:30	A Fresh Look at Float Valves, the First Line of Defense – David Barker (Drilling Tools International). [042]

* [xxx] refers to the AADE paper number. The full paper number is AADE-23-NTCE-xxx

A SPECIAL THANK YOU

The AADE sincerely thanks all of the companies who have contributed to the success of this conference by dedicating resources and allowing their personnel time for planning, organizing, and the realization of this event.



"WE NEVER LEAVE OUR CLIENTS HANGING, ONLY THEIR CASING"

HOME OF THE:

"GAME CHANGER"

REFRAC LINER HANGER SYSTEM



VISIT US AT BOOTH #402

2023 AADE NATIONAL TECHNICAL CONFERENCE AND EXHIBITION

**REVOLUTIONIZING THE WAY YOU REFRAC,
BY ADDRESSING CURRENT WELL DESIGN CHALLENGES!**

- ✓ Optimized for 4" 11.6# Flush Joint Liner with a Hanging capacity of 200,000 lbs inside 5 1/2" 17#-23#
- ✓ Industry Leading ZERO Extrusion Gap 10,000 psi Rated Premium AFLAS® ECS Packer Seal
- ✓ Zero Leak Path One-Piece Solid Body Mandrel
- ✓ Proudly, Designed-Tested-Manufactured-Built turnkey in Montgomery Texas, USA
- ✓ Rigorously Tested and Fully Qualified per API LH19 V2 Requirements

**LINER HANGER
SPECIALIST**

UNDERGRADUATE LEVEL

PDC Bit Wear Evaluation in Enhanced Geothermal Wells. [01]**

- Jose Bocanegra-Yanez (Oklahoma State University)

The Art of Snubbing. [02]

- Marlee Norris (West Virginia University)

Testing Cement Slurry Properties and Zonal Isolation. [03]

- Clay Ostrander (University of Louisiana at Lafayette)

Nano Silica Reinforcement to Mitigate Cement's Strength Retrogression in High-Temperature Wells. [04]

- Sarah Qureshi (Texas Tech University)

Application of Nanoparticles in Drilling Fluid Systems and the Impact Thereof on Overall Drilling Performance. [05]

- Saba Sadiq (University of Wyoming)

GRADUATE LEVEL

Machine Learning Feature Classification of Geopolymers with Scanning Electron Microscopy. [06]

- Cameron Devers (University of Oklahoma)

Lessons Learned from Simulation Fit to Field-Scale Bullheading Experiments. [07]

- Hazem Fleifel (Louisiana State University - Baton Rouge)

Case Study of Gas Injection and EOR Potential in Unconventional Marginal Permian Horizontal Wells. [08]

- Sandarbh Gautam (University of Houston)

Evaluating Cement as a Containment Barrier for Underground Hydrogen Storage. [09]

- Athar Hussain (Texas Tech University)

Characterization of WOB Fluctuations Based on Drillstring Vibration Severity. [10]

- Eshan Maitra (Oklahoma State University)

Effectiveness of Shale Inhibition by Anionic and Cationic Polyacrylamide Copolymers in Water Based Mud. [11]

- Mohamed Metwally (New Mexico Institute of Mining and Technology)

The Predictive Model for Estimating the Effect of Salinity on Fluid Temperature Distribution for Underbalanced Drilling. [12]

- Olaturunji Olayiwola (University of Louisiana at Lafayette)

** [xx] refers to the AADE paper number. The full paper number is AADE-23-NTCE-SPP-xx

ALTERNATE TECHNICAL PAPERS

How a PDC Shaped Cutter Forms the Cuttings to Improve the Cutting Efficiency

- Kian Sheikrezaei, Scott Blaylock, Prabhakaran Centala (NOV). [045]

How Does Flow Rate Affect Drillstring Vibrations? Experimental Investigation

- Eshan Maitra and Mohammed Al Dushaishi (Oklahoma State University). [061]

THANKS TO OUR MEDIA

We wish to thank all the publications who support AADE with digital and print announcements for this conference.

DRILLING
CONTRACTOR

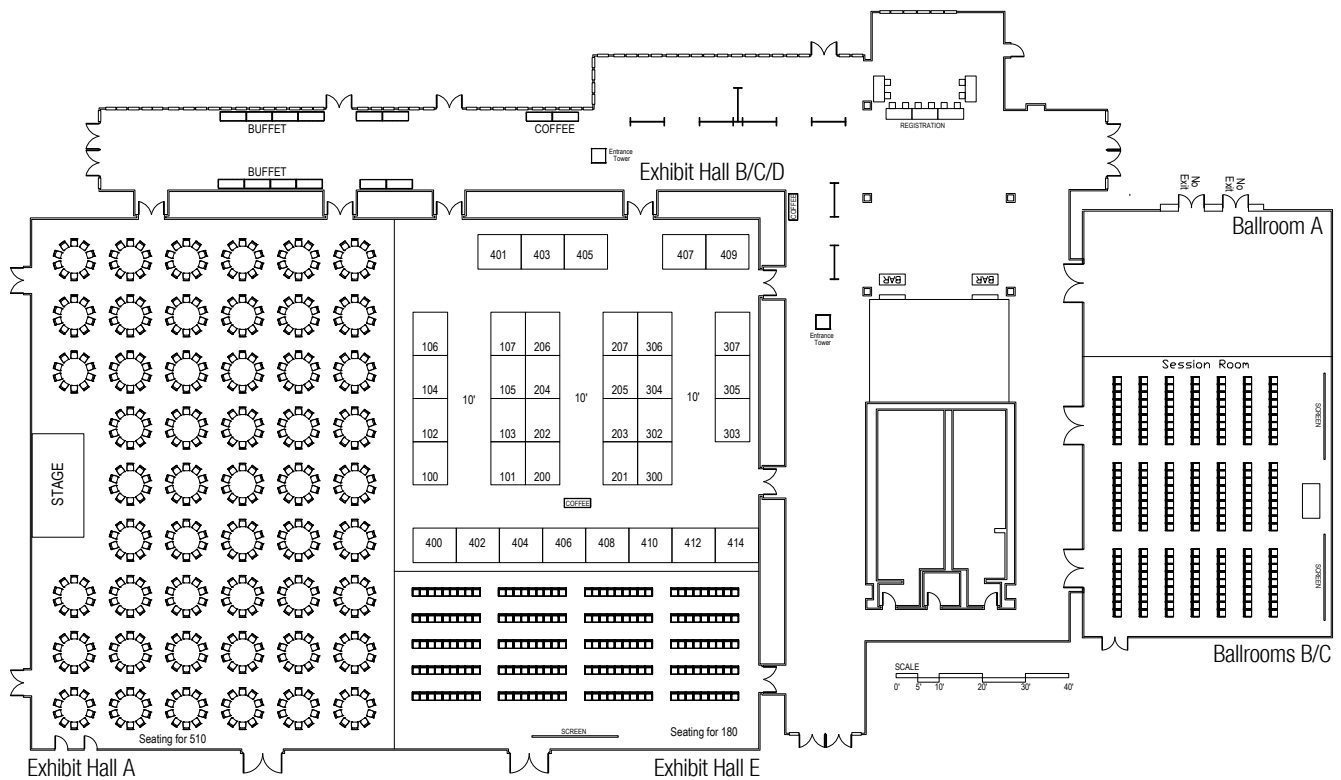
HART ENERGY

Offshore

World Oil

AOGR

2023 AADE CONFERENCE FLOORPLAN



Eco-Friendly Solutions Through Bio-Based Chemistry

Customized for the Drilling Industry

- Sustainable Polymers
- Oil and Gas Drilling
- Aqueous and Non-Aqueous Products
- Horizontal Drilling
- Water Treatment

"AquaSol utilizes the amazing properties of natural polymers to develop specialty chemical solutions for a wide range of industries and applications."

J. Daniel Bennett | President



AquaSol

730 N. Anderson Road
Rock Hill, South Carolina 29739
P: 803-327-3833 F: 866-402-0133

www.aquasolcorp.com

HERE FOR THE LONG RUN



Building on a 30-year legacy of industry-firsts and ground-breaking designs, we look forward to furthering the success of drilling operations for the next 30 years and beyond.

pvfluid.com

THE PROGRESSIVE POWER SECTION COMPANY

**TACTICAL
OILFIELD
PRODUCTS**
"TRAINED ON PREVENTION"



**TACTICAL
BLITZ**

**TACTICAL
EPOXY**

888 783 0036

TACTICALOILFIELDPRODUCTS.COM

2023 AADE EXHIBITORS



7-DYNAMICS
[401]



AES Drilling Fluids
[405]



Allamon Tool Company
[402]



Archer
[307]



Baker Hughes
[412 | 414]



BYK USA
[101]



Cougar Drilling Solutions
[103 | 105]



CUDD Well Control
[107]



Derrick Corporation
[409]



Dover Chemical Corporation
[203]



D-Tech Rotary Steerable
[403]



Evonik Corporation
[207]



FORTA Drilling Division
[200]



GEO Drilling Fluids, Inc.
[303]



Halliburton Baroid
[100]



IADC
[205]



Impact Fluid Solutions
[300]



Ingevity
[302]



JAE Electronics
[106]



Newpark Fluids Systems
[206]



OFI Testing Equipment, Inc.
[306]



Reactive Downhole Tools
[204]



Rival Downhole Tools
[404]



Scout Downhole
[400]



SNF Oil & Gas
[305]



Sooner Pipe
[104]



TAM International
[202]



TTS Drilling Solutions
[407]



Ulterra
[304]



Universal Fluid Services
[410]



Wellbore Integrity Solutions
[102]

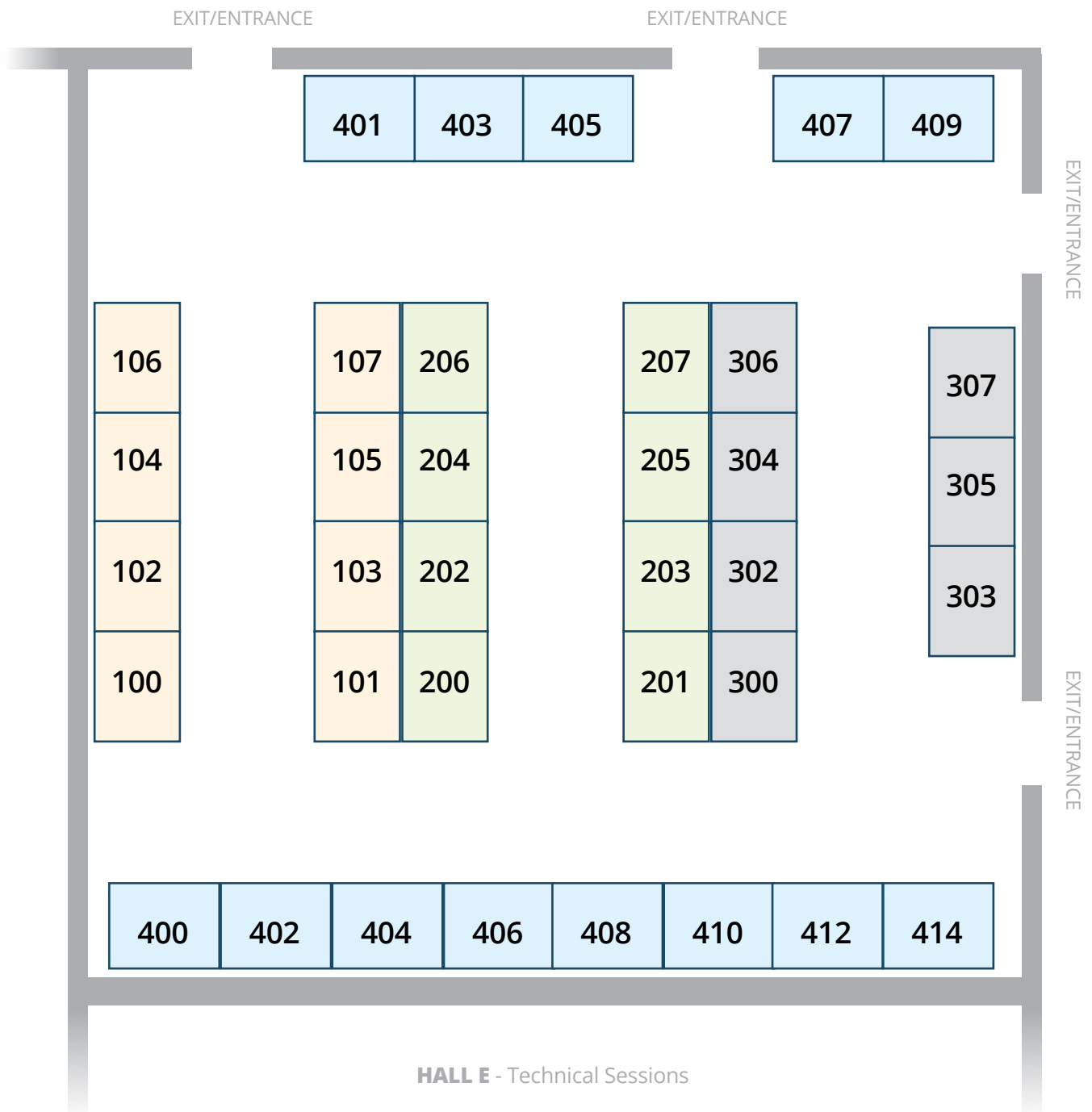


Welltec Inc.
[406 | 408]



Wild Well Control
[201]

EXHIBIT HALL B/C/D



(See page 14 for entire conference floor plan)

2023 NATIONAL TECHNICAL CONFERENCE AND EXHIBITION

We sincerely thank all of our generous sponsors whose support is not only greatly appreciated but also imperative to the conference success.

CONFERENCE SPONSORS

Platinum	Allamon Tool Company
Platinum	Baker Hughes
Platinum	Halliburton Baroid
Platinum	TAM International
Gold	AquaSol
Gold	BICO Drilling Tools
Gold	Ensign Drilling
Gold	PV Fluid Products
Gold	Tactical Oilfield Products
Silver	Abaco Drilling Technologies
Silver	MS Directional
Bronze	Elementis
Bronze	Oxy
Bronze	SLB
Breakfast - April 4	ReedHycalog
Coffee Breaks - April 4	FORTA
Coffee Breaks - April 5	Enventives, LLC
Conference Bag	TTS Drilling Solutions
Conference Bag Insert	Command Tubular Products
Media-A/V	GD Energy Products
Media-A/V	LTC Drilling
Media-A/V	Sooner Pipe
Media-A/V	Turnco, LLC
Name Badge	Shell GTL Fluids
Networking Reception	Paragon ISG
Networking Reception	ProDirectional
Networking Reception	Ultrerra

www.aade.org

A ADE
AMERICAN ASSOCIATION
of DRILLING ENGINEERS