

SOUTHWEST SECTION

American Association of Petroleum Geologists





May 6th-9th, 2023 RAY CLYMER EXHIBIT HALL Multi Purpose Event Center 1000 5th Street Wichita Falls, Texas



MILESTONES IN GEOLOGY Celebrating the NTGS Centennial

* Field Trip - Saturday, May 6th

- The Arbuckle Mountains, Southern Oklahoma Seismic Scale Structure and Stratigraphy of the Arbuckle Mountains
- Led by Dr. Molly Turko Turko Tectonics & Structural Geology
- The trip leaves the MPEC for Arbuckle Fried Pies in Davis, Oklahoma
- Study Precambrian failed rifts, Post-Rift Subsidence, the Pennsylvanian Orogeny and walk the Hunton Anticline
- Lunch at Turner Falls

Field Trip limited to 40 attendees

Annual SWS-AAPG Short Course – Sunday, May 7th

- Sequence Stratigraphy Concepts and Practical Well-Log Applications
- Presented by Dr. Jeff May– Colorado School of Mines
- Designed for exploration and development geologists who want an introduction to sequence stratigraphy and the ability to create geologically meaningful well-log correlations and maps
- This course also will benefit geophysicists who routinely construct well-to-seismic ties and integrate their interpretations with the work of geologists, paleontologists, and/or reservoir engineers
- In addition, reservoir engineers, petrophysicists, and geosteerers can apply the concepts and techniques presented to aid their day-today tasks

Icebreaker – Sunday Evening, May 7th

The traditional icebreaker kicks off the convention!

- Native son Mike O'Neill and band returns to Wichita Falls from Rockport, TX to play his smooth style of blues. Don't miss this!!
- · Visit with our exhibitors while reconnecting with old friends and making new contacts
- Feast on shrimp, tenderloin, and heavy hors d'oeuvres
- *Admission with name badge; cash bar

* Technical and Poster Presentations - May 8th and 9th

- Conventional and unconventional resource plays in Texas and Southern Oklahoma
- · Papers and posters covering frontier exploration areas and alternative exploration techniques
- Presenters interested in participating may contact Chris Gunn cgunn@gunnoil.com or Chad Cummings ccummings@gunnoil.com

"Western Night with the Wichita Falls Mavericks" – Monday Evening, May 8th

Corralling friends for Wichita Falls, the Mavericks cook all day preparing a tender rib dinner with all the trimmings

- Maverick members are local businessmen including bank presidents, attorneys, judges, oilmen and legislators
- The Mavericks Western Swing Marching Band will play for your entertainment
- Afterwards, stroll the downtown streets to Ganache for cupcakes in the original Zales Jewelry Store. Cupcakes by Sweet 1020

• Mosey across the street to OG Cellars for a wine tasting, the Half Pint for a beer smorgasbord, or a Downshift at the Wichita Falls Brewery *All events require professional registration*

For more information on the convention, go to: <u>http://www.ntgeologicalsociety.org/2023-sws-aapg-convention/</u>





EXHIBITORS



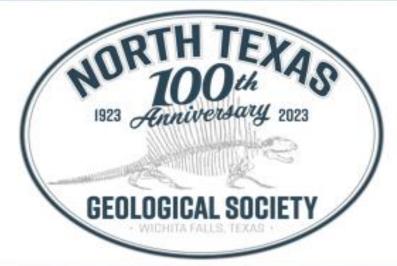
American Association of Petroleum Geologists **Diversified Well Logging DrillPlus Coring Solutions** Earth's Fine Art GeoFrontiers **Geolumina Corporation Geomap Company GVERSE/Geographix** Jim CR Flis 3D Maps **Mid-Continent Geological Library MSU Texas Kimbell School of Geosciences** Neuralog, LP NodalSeismic **Oil Information Library - Wichita Falls PBE Podcast Paragon Geophysical Services Premier Corex Raptor Consulting Inc RECON Petrotechnologies**, Inc. **RevoChem ROGII** Inc Sabata Energy Consultants LLC Special Core Analysis Laboratories, Inc Selman and Associates LTD Suttles Logging, Inc TGS **Texas Tech Petroleum Engineering** West Texas Geological Society







American Association of Petroleum Geologists



May 6th-9th, 2023 RAY CLYMER EXHIBIT HALL Multi Purpose Event Center Wichita Falls, Texas

MILESTONES IN GEOLOGY Celebrating the NTGS Centennial

<u>Saturday, May 6th</u> 8:00am - 6:00pm

<u>Sunday, May 7th</u> 7:00am - 7:00pm 8:00am - 4:30pm

12:00-3:00pm 6:00pm - 9:00pm

Monday, May 8th

7:00am - 4:00pm 7:00am - 8:00am 8:00am - 11:45pm 8:00am - 8:55am 8:55am - 11:45am 11:45pm - 1:15pm 1:15pm - 5:10pm 1:15pm - 5:10pm 6:00pm - 9:30pm

Tuesday, May9th

7:00am - 11:00am 7:00am - 8:00am 8:00am - 12:00pm 8:00am - 12:00pm 12:00pm - 1:15pm 1:15pm - 5:00pm The Arbuckle Mountains - Southern Oklahoma Field Trip Ray Clymer Exhibit Hall, Room 1 Registration 7:00am - 8:00am MPEC Lobby

Convention Registration at Ray Clymer Exhibit Hall, MPEC Lobby Short Course: "Sequence Stratigraphy Concepts and Practical Well-Log Applications " Ray Clymer Exhibit Hall B Southwest Section Board Meeting – MPEC Board Room Convention Ice Breaker Ray Clymer Exhibit Hall, Rooms 1-4

Convention Registration at Ray Clymer Exhibit Hall, MPEC Lobby Speakers/Moderators and Judges Breakfast Hall A Exhibit Halls 2-4 Opening Ceremonies Room 1 Keynote Speaker and Technical Sessions Room 1 All-Convention Luncheon: Allen Lazenby MPEC Hall A Technical Sessions Room 1 Exhibit Halls 2-4 Western Night with the Wichita Falls Mavericks – Downtown Farmers Market

Convention Registration at Ray Clymer Exhibit Hall, MPEC Lobby Speakers/Moderators and Judges Breakfast Hall A Technical Session Exhibit Halls 2-4 DPA Luncheon: James A. Gibbs Hall A Technical Sessions/Closing remarks



SOUTHWEST SECTION



American Association of Petroleum Geologists

RAY CLYMER EXHIBIT HALL - Multi Purpose Event Center May 6th-9th, 2023 Wichita Falls, Texas

SPONSORSHIPS AVAILABLE

The North Texas Geological Society will celebrate our 100th Anniversary by hosting the Southwest Section of the American Association of Petroleum Geologist annual convention in Wichita Falls, Texas May 6-9, 2023, at the Multi-Purpose Events Center. Our theme for this year's meeting is *Milestones in Geology* and includes two days of Technical Sessions on Conventional and Unconventional Resource Plays, along with the applications of technology relating to exploration and exploitation. The convention also includes a Field trip to the Arbuckle Mountains of Oklahoma and a daylong seminar on Practical Well-Log Applications Relating to Concepts in Sequence Stratigraphy.

Past Southwest Section meetings in Wichita Falls have been well attended and should attract some 300 delegates from north and west Texas as well as Oklahoma. The NTGS is currently seeking industry sponsors for this event. Six levels of sponsorship are available: Platinum \$10,000, Diamond \$5,000, Gold \$2,500, Silver \$1000, Bronze \$500, and Patron \$250. Contributions at any level help create a profitable and successful meeting. Sponsors will have their names prominently displayed at both the entrance to the Convention Hall, on the main screen in the lecture halls, on our pocket program and throughout the meeting halls.

The response to the 2022 convention in Midland was outstanding and supported a very successful meeting. Industry support for the 2023 Convention is greatly appreciated. Please make checks payable to the SWS-AAPG 2023 Convention, P.O Box 1671, Wichita Falls, TX 76307-1671.





Sponsorship LevelsPlatinum\$10,000Silver\$1,000Diamond\$5,000Bronze\$500Gold\$2500Patron\$250

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Thank you for investing in the success of the SWS of intellectual knowledge provided at this confer		l Convention and the transfer
Your participation in the SWS-AAPG Ann	ual Conventio	on is deeply appreciated.
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The NTGS is a 501(C)6 member based non-profit organization





Opening Ceremony: Monday May 8, 2023, 8:00am - 8:30am

8:00am	Craig Reynolds- General Chair History of the NTGS- 100th Anniversary 1923-2023				
Se.	Jerry Hickman- President SWS-AAPG Award Presentation				
NIR!	Keynote Speaker: Monday May 8, 2023, 8:30am - 9:30am				
8:30am	The Assembly of Pangea, a view from Laurentia- Paleozoic Orogenies and their Impact on Basin Evolution and Petroleum Systems, Kurt Rudolph				
9:30am	BREAK, Exhibit Hall				
	Oral Session 1: Monday, May 8, 2023, 10:00am – 11:50am				
10:00am	Anadarko "Super" Basin: Eight Key Characteristics to Understand Its Unique Productivity, Rick Fritz				
10:25am	The Birth and Tectonic Evolution of the Anadarko Super Basin, Dr. Molly Turko				
10:50am	Applications of Organic Applications of Organic Geochemistry to Modeling Hydrocarbon Charge Events in Source-Adjacent Reservoirs: STACK Case Study, Dr. Carl Symcox				
11:15am	The Nascent Commodity Super Cycle, William Demis				
11:40am	<u>All Convention Luncheon</u> Development of the Rubiales Field Meta Department, Colombia Allen Lazenby				
	Poster Session 1: Monday, May 8, 2023, 10:00am –12:00pm*				
2	Establishing a preliminary correlation of Silurian units in the Permian Basin region (Texas, USA) through bio-chemostratigraphic analysis of cores. Andres De la hoz				
5	3-D Structural Mapping and Seismic Attributes Analysis for Hydrocarbon Prospectivity of Semliki Basin, Western Branch of the East African Rift System Bright Osuagwu				
?	Characterize Water Infiltration Pathways in Central Texas Cretaceous Formation using LiDAR Remote Sensing, Kathryn Brown				





Oral Session 2: Monday, May 8, 2023, 1:15pm – 5:10pm

- 1:15pm Geochemical Drainage Data Reveal Key Controls on Production in the Anadarko Basin STACK Play, Jana Bachleda/ Bob Aylsworth
- 1:40pm Geochemistry and Petroleum Systems Analysis of Anadarko Basin to Better Understand Hydrocarbon Phase Behavior, Maturity and Migration in Stack and Scoop Area Dr. Wahid Rahman
- 2:05pm Geochemical Exploration Fluorescence is the Gateway to Liquid Hydrocarbons, Dr. Gary Rice
- 2:30pm West Texas (Permian) unconventional resources: Fifteen years of exploration, discovery, development, and production, what we have learned, and where we are headed **Bill Fairhurst**
- 2:55pm BREAK, Exhibit Hall
- 3:30pm Bell Canyon Toe-of-Slope Deposition on the Western Margin of the Delaware Basin: Integration of Outcrop and Subsurface Data, **Dr. Alton Brown**
- 3:55pm Delaware Basin Horizontal Wolfcamp Case History: HTI Fracture Analysis to Avoid H2S and Extraneous Water Linked to Graben Features, Scott Cook
- 4:20pm Identifying mass-transport deposits using image logs and core in Bone Spring and Wolfcamp Formations, Delaware Basin, **Josh O'Brien**
- 4:45pm Overlooked Influence of Bottom Currents in Early to Middle Permian Strata of the Midland and Delaware Basins, West Texas and Southeast New Mexico, **Buddy Price**

Poster Session 2: Monday, May 8, 2023, 3:00pm – 5:10pm

- Using seismic data to understand rift evolution in Magma Poor Rifts.
 An example of the Albertine Rift., Damilola Ola
- Groundwater Recharge Estimation based on Drip Loggers and LiDAR Data:
 Edwards Aquifer, Central Texas, **R. Remie**
- Limb bone lost to time: Understanding the function of the cleithrum in Dimetrodon Lauren Stancik





Oral Session 3: Tuesday, May 9, 2023, 8:00am – 12:00pm*

8:00am	Petroleum Geology of the Lake Kickapoo East (Caddo) Field, Archer County, Texas Dennis Browning				
8:25am	Barnett Shale Play, The Petroleum industry's Shale 101, Dan Steward				
8:50am	Lithological and Geochemical Control on Varied Reservoir Heterogeneity and Fluid Saturation in the Mississippian Barnett Shale, Fort Worth Basin, Texas: From Late Oil to Dry Gas Window, Dr. Lucy Ko				
9:15am	Can Adding a Fluid Factor Aid in Understanding Induced Seismicity?, Brian Rader				
9:40am	Contrasting Siliciclastic-Dominated Cores from the Middle Pennsylvanian (Desmoinesian) Strawn Formation, East Kent County, TX: Wallace Ranch #1 and #2 Dr. Max Pommer				
10:05am	BREAK, Exhibit Hall				
10:45am	Regional and Local Variability in Lowstand Valley-Fill and Deltaic Deposits in the Tannehill Sandstone (Cisco Group), Eastern Shelf of the Permian Basin, Bill Ambrose				
11:10am	Facies characterization of Wolfcamp D along a transect from the Eastern Shelf to the Midland Basin, Dr. Toti Larson				
11:35am	Where is all of this Gas going to come from? Expect a Natural Gas price "break-out" in mid-2023., Donald Muth				
12:00pm	DPA Luncheon Q & A with AAPG Legend., James A. Gibbs				
	Poster Session 3: Tuesday, May 9, 2023, 10:00am – 12:00pm*				
2	Geology of the Lake Grapevine Spillway; a Sedimentologic, Ichnologic and Chemostratigraphic Evaluation of the Depositional Environments of the Upper Woodbine in North Central Texas, Bo Henk				
5	Geology of the Lake Grapevine Spillway; a Sedimentologic, Ichnologic and Chemostratigraphic Evaluation of the Depositional Environments of the Upper Woodbine in North Central Texas, Henry Henk				





Oral Session 4: Tuesday, May 9, 2023, 1:15pm – 5:00pm

Complex clastics and associated carbonates of the Strawn Formation: Re-evaluation of 1:15pm deposystem interpretations from core and outcrop-based investigations, Dr. Peter Flaig 1:40pm Carbonate and mixed carbonate-clastic facies variability across the Upper Strawn Formation on the Eastern Shelf: Preliminary core-based observations, Dr. Kelly Hattori An Underexplored Cisco Carbonate Oil Play in the Palo Duro Basin, Eric Radjef 2:05pm BREAK, Exhibit Hall 2:30pm Carrier Beds as Reservoirs, Dr. John Breyer 3:00pm Discovery of the Flat Top JC (Strawn, Upper) Field, Haskell, Jones & Stonewall Cos., Texas. 3:25pm How we got there and what we found., Gregg Norman The Application of Machine Learning Technology to Understand the Subsurface -3:50pm Carbonates, Deborah Sacrey Delta- (): Exploring Applications of Vertical Variations in Bulk Volume Water, 4:15pm **Dr. Steven Henderson** 4:40pm Where The Sidewalk Ends: Delineation and characterization of an unconventional reservoir's commercial boundary by appropriate modification of Herron's permeability model, Bakken-Three Forks play, Dunn Co., ND., Joe Bauman

* Poster Presenters will have their posters displayed on Monday from 8:00am-12:00pm with presenters at their posters from 10:00am-12:00pm. Monday afternoon poster session will have posters displayed from 1:00pm-5:00pm with presenters at their posters from 3:00pm-5:00pm. Tuesday morning presenters will have their poster displayed from 8:00am-12:00pm with presenters at their poster from 10:00am-12:00pm.

The Arbuckle Mountains, Southern Oklahoma Structure, Stratigraphy, & Seismic Applications <u>for Subsur</u>face Mapping

Dr. Molly Turko Turko Tectonics and Structural Geology, LLC, Oklahoma City, OK

Saturday, May 6th 8:00am-6:00pm Ray Clymer Exhibit Hall, MPEC Lobby



The Arbuckle Mountains had an action-packed tectonic history starting with a failed Precambrian rift, followed by deposition of the Great American Carbonate Bank, and ending with uplift and inversion of the failed rift during the Pennsylvanian Orogeny.

This inevitably led to the complex faulting and folding we see at the surface which includes thrust faults, strike-slip faults, normal faults, and incredible fracture patterns. On this field trip we will look at the kinematic indicators for each structural style and discuss how an evolving stress field led to multiple structural styles, which have historically been debated amongst geologists. These concepts can be applied to the subsurface in the petroleum-rich basins expanding through southern Oklahoma and north Texas. The Arbuckle Mountains were also a playground for early geophysicists as they tested the technology that would soon be applied to mapping the subsurface all over the world. On this trip we'll have an opportunity to see the monuments dedicated to them and hope to have a viewpoint of one of the first ever geophysical experiments from 1921. Join us for a day full of geology, history, and adventure in the legendary Arbuckle Mountains of southern Oklahoma

Field Trip and Convention Registration is Saturday, May6th at the Ray Clymer Exhibit Hall, MPEC. The field trip is limited to 40 people. Convention registration is required for attendance.





2023 Annual SWS-AAPG Short Course

Sequence Stratigraphy Concepts and Practical Well-Log Applica<u>tions</u>

Dr. Jeff May – Consultant and Affiliate Faculty Colorado School of Mines



Introduction

This one-day classroom seminar provides an introduction to the basic concepts and models of sequence stratigraphy. By incorporating hands-on exercises, it emphasizes a practical approach to the sequence stratigraphic analysis of well logs and its application to well-log correlations.

The key objective of this short course is to develop the techniques and skills to subdivide, correlate, and map stratigraphic units (reservoirs, seals, and source rocks) through the application of sequence stratigraphic concepts to well logs in a variety of nonmarine, shallow-marine, and deep-marine environments in siliciclastic and carbonate settings. Such skills allow one to subdivide stratigraphic intervals into meaningful genetic packages, interpret depositional histories, and build geologically accurate maps to enhance exploration and development. Ultimately, participants will develop analytical insights and skills necessary to help identify and predict new prospects, assess drilling targets, and better produce reservoirs.

The class is designed for exploration and development geologists who want an introduction to sequence stratigraphy and the ability to create geologically meaningful well-log correlations and maps. This course also will benefit geophysicists who routinely construct well-to-seismic ties and integrate their interpretations with the work of geologists, paleontologists, and/or reservoir engineers. In addition, reservoir engineers, petrophysicists, and geosteerers can apply the concepts and techniques presented to aid their day-to-day tasks.

As a course prerequisite, participants should possess a basic knowledge of siliciclastic and carbonate depositional settings and facies. Familiarity with wireline logs also is highly desirable.

Jeff received his B.A. in Geology from Earlham College, M.S. in Geology from Duke University, and Ph.D. in Geology from Rice University. He has worked in the oil and gas industry for over 40 years: as a research geologist with Marathon Oil Company (1981-1994); as a geological and geophysical consultant with Enron Oil & Gas (1994-1996) and GeoQuest Reservoir Technologies (1996-1998); as an exploration geoscientist with DDD Energy (1998-2001); and with EOG Resources beginning in 2001, first as Chief Stratigrapher and then as Chief Geologist, until his retirement in 2011. He also leads a variety of classroom and field seminars on clastic facies, deep-water sandstones, sequence stratigraphy, and mudrock deposition and stratigraphy, most notably for the American Association of Petroleum Geologists, the Petroleum Technology Transfer Council, Nautilus Worldwide, many oil and gas companies, and universities.

*Short Course and Convention Registration is Sunday, April 12th from 7:00-8:00am in the Ray Clymer Exhibit Hall B at the MPEC. Basic convention registration is required for attendance.



Keynote Speaker Kurt Rudolph



Former ExxonMobil Chief Geoscientist – Adj. Professor at the Univ. of Houston and Rice University

Monday, May 8th – Ray Clymer Exhibit Hall, Room 1 MPEC The Assembly of Pangea, a view from Laurentia – Paleozoic Orogenies and their Impact on Basin Evolution and Petroleum Systems

Paleozoic North America has experienced multiple mountain building events, from Ordovician to Permian, on all margins of the continent. These have had a profound effect on the resulting complex basins and their associated petroleum systems. Subsequent uplift, erosion and overprinting of these ancient systems impedes the direct observation of their tectonic history. However, the basin sedimentary records are more complete, and provide additional insights into the timing and style of the mountain building events. In this study, we employ ~90 1D basin models, ~30 inverse flexural models, isopachs, and paleogeographic maps to better understand the Paleozoic history of North America. From this screening, four thematic learnings emerge:

<u>Constraints on the magnitude, timing, and location of collisional events.</u> For the final Appalachian Orogeny, the Alleghanian event, the onset of flexural subsidence becomes younger to the northeast. Whereas the Ouachita Orogeny youngs to the southwest. These observations suggest the docking of Gondwana in the Pennsylvanian-Permian was diachronous due to a progressive closure from an indenter in the Alabama-Kentucky area. The influence on stratigraphy and petroleum systems is profound – e.g., the deep-water systems of the Arkoma-Fort Worth-Val Verde system are dominantly Atokan in the east and Wolfcampian in the west.

<u>Kinematic linkages between continent margin and interior.</u> "Sag" basins, whose origins remain cryptic, can be tied to adjacent orogenies. The Michigan Basin has synchronous timing, and a similar evaporite fill as the Salinic portion of the Appalachian foreland. And the Williston Basin appears tied to the north Antler (Liard) foreland with Middle Devonian to Early Mississippian subsidence and deformation (e.g., Nesson Anticline). Ancestral Rocky Mountain (ARM) basins of the continental interior also share kinematic linkages, based on subsidence timing. For example, two phases of subsidence are shared for the Marathon Orogenic Belt (Val Verde-Marfa) and greater Permian Basin (Midland-Delaware Orogrande). Initially, a Virgillian-Wolfcampian period of variable rapid subsidence (basins) and synchronous uplift (platforms) occurs. Followed by a period of long-wavelength subsidence (Leonardian-Ochoan) that flood the platforms and facilitates the development of carbonate reservoirs, such as the Clearfork and San Andres.

<u>Controls on sedimentary fill character and source rocks.</u> Often, the onset of rapid subsidence associated with orogenesis is marked by a rapid transgression and condensed section that is associated with marine source rocks and shale reservoirs. As sedimentation catches up to the increased accommodation, a thick sedimentary wedge progressively fills in the flexural basin. This pattern is observed for the Utica (Taconic), Marcellus (Acadian), Wolfcamp (Delaware and Midland), Horn River (Liard), and Gothic/Cane Creek/etc. (Paradox) source rocks.

<u>Reconstruction of thick Permian basin fill in exhumed basins.</u> Many of these basins have experienced significant post-Paleozoic erosion by vertical unroofing and/or subsequent deformation. This has made understanding of the latest Paleozoic basin history difficult. High vitrinite reflectance in outcropping or shallow strata indicate significant burial and ensuing removal. In most cases, this additional burial cannot be attributed to significant Mesozoic-Cenozoic sedimentation. Using calibrated basin models, significant upper Pennsylvanian and Permian section has been restored in a number of these basins.

Kurt Rudolph received a B.S. in Geology from Rensselaer Polytechnic Institute and an M.A. in Geology from the University of Texas. He worked 37 years in industry, mostly at ExxonMobil. Among the positions he held included Research Geologist, Chief Interpreter in Kuala Lumpur, Technical Advisor for the Africa and Middle East Region, and Hydrocarbon Systems Resource Manager. He won Wallace Pratt Awards for the best AAPG Bulletin paper in 1994 and 2017. From 2002 until his retirement in 2015 he was Chief Geoscientist for ExxonMobil. Since then, Kurt has been an Adjunct Professor at the University of Houston and Rice University.







ALL – CONVENTION LUCHEON MONDAY MAY 8TH – MPEC Hall A Allen Lazenby – Arbol Resources, Inc. – Houston, TX Development of the Rubiales Field Meta Department, Colombia

Wichita Falls native son Allen Lazenby returns for the 100th Anniversary of the NTGS to discuss the entrepreneurial spirit that led him to develop the Rubiales Oil Field in the Llanos Basin, Meta Department, Colombia. Allen co-owned, operated, and initiated the early development of the Rubiales Field during the late 80's and 90's. Rubiales was developed in a unique co-existence community and environmental fashion, long before CEOs environment "buzzwords" became so vogue in our industry as today.

Rubiales Field is a unique blob of heavy crude oil (12.5°) whose economic size is 4.17 billion barrels of oil-in-place with an estimated 272 million barrels recoverable. The monoclinal basal sand trap occurred as the deeper oil was migrating shallower out of the basin and contacted an active freshwater aquifer migrating in the opposite direction. The combination created a perfect natural high geothermal gradient and hydrodynamic trap for the stationary heavier crude oil.

Older technologies during the 80's (cement plug-open hole completions, old school conventional Lufkin pumping units, road trucking, creative early water disposal methods coupled with oil prices of \$20/bbl.) were required to prove commerciality to the Columbian government with the gross production of 1 million barrels. Evolving technologies since 2007 (limited 20 ft. target horizontal drilling, progressive cavity pumps, pipelines to the refinery and export facilities, and prices upwards of \$120/bbl.) have continued to improve Rubiales' ultimate EOR.

The development of Rubiales comes with fascinating and often horrifying details of working in the Colombian jungles among indigenous Indians, piranha attacks, along with the Colombian government and organic farmers. Allen's witnessing of Colombian gunfights, executions, and then the kidnapping of his own company employees only complicated how his team managed to develop Rubiales under such trying circumstances. He learned much more than any U.S. citizen should about dealing with our DEA. As the Colombian drug cartel pressed closer to Allen's operations, he was summoned by Pablo Escobar for a showdown meeting. Fortunately for us, Allen is alive and here today to describe the results of his persistence.







DPA LUCHEON TUESDAY MAY 9TH – MPEC Hall A James A. Gibbs – Five States Energy – Dallas, TX Q & A with AAPG Legend James A. Gibbs

Wichita Falls native son Jim Gibbs returns for the 100th Anniversary of the NTGS to discuss his career, professionalism and the ethics behind being an independent geologist. Jim is a Manager of Five States Energy Capital, LLC and serves as Chairman of the Board of Managers of Five States Energy.

Jim served as President of the AAPG from 1990-1991 and as Chair of the AAPG Foundation Trustees from 2013-2021. He was awarded the Michel T. Halbouty Award for Outstanding Leadership in 2020. His vast exposure within the AAPG and Southwest Section manifests our members to learn from his experiences. Submit questions for Jim to answer and discuss during this intriguing session.

He received a BS in Geology from the University of Oklahoma (1957), then served as a communications officer in the US Navy from 1957 to 1959. He received an MS in Geology from the University of Oklahoma (1962).

In 1962, Mr. Gibbs was employed as a geologist by The California Company (now Chevron-Texaco) in New Orleans and Lafayette, Louisiana. In 1964, he opened an office in Dallas, Texas, as a consulting geologist and independent oil and gas producer. He has initiated drilling prospects, purchased and sold oil and gas leases, operated wells, and served as an exploration consultant to several companies. From 1975 to 1978, Mr. Gibbs consulted exclusively for Petrus Operating Company. From 1978 to 1981, he consulted for Cornell Oil Company. From 1981 to 1983, he consulted for Lyco Energy Corp. Since 1964, he has participated in drilling more than 600 wells, primarily in Texas, Louisiana, and Oklahoma.

Jim authored the AAPG book "Becoming an Independent Geologist: Thriving in Good Times and Bad".





SWS-AAPG Educator Outreach

ENERGY FROM EARTH SYSTEMS

Dr. Rebecca Dodge

SATURDAY MAY 6TH Bolin Science Hall Midwestern State University



Energy from Earth Systems: Non-renewable and Renewable Energy Resources will be taught by Dr. Rebecca Dodge, Professor Emeritus, the Department of Geosciences, Midwestern State University. The workshop is designed for Middle and High School teachers who teach, or are going to teach, Earth Science and Environmental Science, and need foundational knowledge about energy resources. Teachers will benefit from this course by gaining content knowledge they need to teach with confidence. They will engage with free materials developed by teachers and energy professionals, and gain access to a broad spectrum of lessons and learning activities within a virtual classroom setting that include integrated readings, videos, assessments, and games that address basic energy concepts, forms of energy, and both nonrenewable and renewable energy sources. They will also learn about the current energy mix and realistic options for the ongoing transition towards a more diverse energy future, including the full picture of the impacts of all energy sources.





AAPG Women's Network at the SWS-AAPG

The AAPG Women's Network (AAPGWN) is an AAPG Special Interest Group (SIG), made up of men and women who are dedicated to promoting the technical and professional prowess of AAPG's women members. The AAPGWN has a mentoring program open to all AAPG members. Members can sign up to be a mentor, mentee or both. The mentor program strives to develop personal and professional relationships that can help you learn and grow. The mission of AAPGWN is to make a positive difference, provide guidance, support, increase participation and promote the advancement of women in geosciences and the Energy Industry. The emphasis will be on education, outreach, support, leadership development, and ultimately, retention and engagement. The AAPGWN will interact with <u>men and women</u> in geoscience, their peers and employers, educational institutions, and professional societies to accomplish this mission. The vision of the AAPGWN is to lift the status of women in the petroleum geosciences such that women's issues become non-issues.

The AAPG Women's Network site is https://www.aapg.org/womens-network Heather Anderson, PG, Independent Consultant, is the SWS AAPGWN representative and invites all who are interested in the Network to stop by the AAPG booth in the Exhibit Hall and pick up additional information.

"Rock the Falls Ice Breaker" Mike O'Neill Band Sunday at 6:00, MPEC Exhibit Halls 1-4

The traditional icebreaker opens the convention at 6:00pm. Visit with our exhibitors while getting reacquainted with old friends and making new contacts. Feast on plenty of shrimp, tenderloins and heavy hors d'oeurves. Drink tickets and cash bar. Admission by name badge.

Native son and legendary blues guitarist, Mike O'Neill returns to host the icebreaker. He has performed with Delbert McClinton, Stephen Bruton, Jerry Fisher of Blood, Sweat and Tears, the Doobie Brothers, Freddie King, T-Bone Burnett and Daddy-O. He currently lives in Galveston, Texas, is the lead guitarist for the TexasBluesrunners based out of Austin and is making a special appearance for the Southwest Section-AAPG.

O'Neill began playing guitar when he was 15.

"In my day, most kids my age didn't have cars or anything, so you did things like play guitar," he said. By the time he was 16, he turned to the blues, playing at the old Chatter Box Club on Flood Street in

East Wichita Falls, and by the time he was 19, he was offered a job with road band Jerry Fisher and the Night Beats. (Fisher later sang with Blood, Sweat and Tears.) After moving to Fort Worth, O'Neill joined Delbert McClinton's band and played on his first two Atlantic records. As a part of McClinton's band, he had the opportunity to play on stage one night with English blues legend John Mayall. He also met Stephen Bruton, T-Bone Burnett and Garry Nicholson, among others, from that gig. He has since performed many times with Bruton and Nicholson.

O'Neill would move to the West Coast and work as an in demand session performer and part-time touring player. Along the way, he recorded and/or toured with everyone from Bobby Whitlock (from Derek and the Dominos) to Freddie King. O'Neill played lead on the Freddie's Live at World Armadillo Headquarters album. He also played with Kingfish and individually with many of the Doobie Brothers.

O'Neill can also be heard on albums with Delbert

McClinton when McClinton partnered with Glen Clark for a time. Later, he played with Huey Lewis and John McFee when they were with the West Coast band Clover (McFee went on to become a principal member of the Doobie Brothers and Lewis gained fame with Huey Lewis and the News). He also has played with Jim Hodder, the original drummer from Steely Dan.

In all that time on the West Coast, O'Neill said one tour stands out. It was the one with Electric Light Orchestra—a band Casey Casem called "the world's first touring rock 'n' roll chamber group." "I was on tour with a band called Kingfish, which was an offshoot of The Grateful Dead," O'Neill said. "We opened for ELO. The tour took us all over the United States. It was the late '70s — the Out of the Blue Tour. It was impressive — a large tour, and we played venues of 40,000 to 60,000 people, like Anaheim Stadium ... gosh, the Spectrum in Philly. We called it the Spaceship Tour. It was probably before the laser light shows." No laser lights at the Ice Breaker, just a roomful of bluesy Mike O'Neill. Don't miss it!

"WESTERN NIGHT" WITH THE WICHITA FALLS MAVERICKS MONDAY EVENING – 6:00 PM downtown farmers market – 713 ohio and 8th street 6:00 PM



"Corralling Friends for Containing Friends fo

The Mavericks organization was established to promote the city of Wichita Falls; to promote the continuance of public or "Chuck Wegen" style cooking; and to honor and aid persons and organizations which have been, or will be, beneficial to the City of Wiching Falls.

During a calendar year, The Cravericks conduct various official functions to add a true taste of Tex is concrevent their Chuck Wagon goes. With tender, juicy ribs prepared just chemical were in the good ole' days, the slow-smoked meat falls right off the hone. They specialize in tangy ranch style beans, buttery corn on the cob, and creamy frequencies law.

The Maverick western wing band will play for your entertainment.

Appetizers with ature the famed red soft tacos from Casa Manana, which is celebrating their 75th year in business. These unique red corn tortilla tacos are dipped in a wine sauce to soften the tortilla. A local favorite!

Following dinner, mosey over for a cupcakes by Sweet 1020 at the Ganache Bakery located in the original Zales Jewelry Store on Eighth Street. Then head across the street to OG Cellars in the Holt Hotel for a wine tasting, the perfect way to end your evening. Not ready to stop? The Half Pint Taproom at 817 Ohio has a plethora of craft beers on tap while a stroll down to the Wichita Brewery at 701 Indiana features their Downshift beer.

SOUTHWEST SECTION

American Association of Petroleum Geologists

Hotel Information

2023 Southwest Section of the AAPG Annual Convention

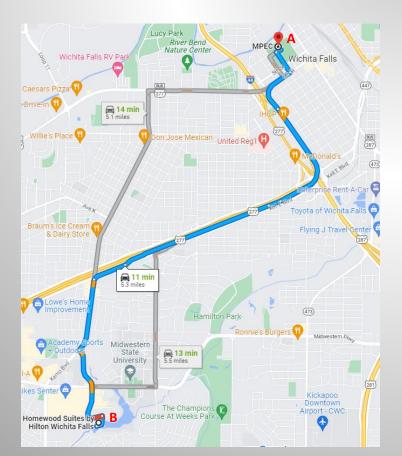
Blocks of rooms have been reserved at the hotels listed below. Hotel locations are shown on the included map. The blocked rooms will be held until April 21, 2023. Please ask for the Southwest Section AAPG rate when booking. Rates do not include taxes and fees.

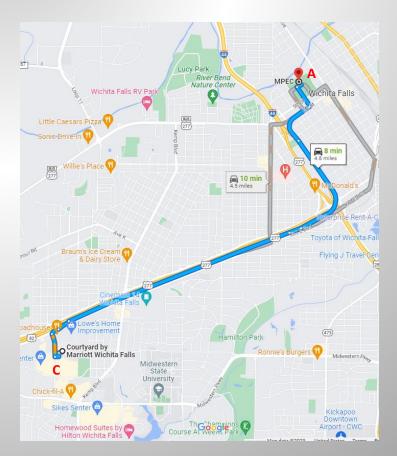
Convention Site: Ray Clymer Exhibit Hall - Multi-Purpose Events Center - 1000 5th Street(A)

- 1. Hilton Homewood Suites (B): 2675 Plaza Parkway 940-691-4663 Rates: King Studio Suite - \$144.00 King Bed Suite - \$154.00 Two Queen Beds Suite - \$164.00
- 3. tru by Hilton (B) 2681 Plaza Parkway 940-400-1050 Rates: King Room - \$129.00 Queen Room - \$139.00

- 2. Home2 Suites by Hilton (B) 2675 Plaza Parkway – 940-691-4663 Rates: King Suite - \$139.00 Queen Suite - \$149.00
- 4. Courtyard by Marriott (C) 3800 Tarry Street – 940-696-0010 Rates: Standard Double - \$149.00 Standard King - \$149.00

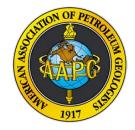
Other accommodation options are available: <u>http://wichitafalls.org/directory/?category=18&type=1</u> However, no rooms are set aside for the Southwest Section.











Name:	Your Name for Badge:			
AAPG member: (Circle) Yes or No Divisions: (Circle) DPA ♦ EMD ♦ DEG	Guest/Spouse Name:			
Company Name:	E-mail:			
Street Address:	Phone: (Include Area Code)			
City/State/Zip:				
Please circle all that apply. I am a(n) Exhibitor ♦ Speaker ♦ Sponsor				

I would like to judge... Orals ♦ Posters ♦ Either

By registering for the Southwest Section meeting, I release and agree to indemnify the Southwest Section, The American Association of Petroleum Geologists (AAPG), and the North Texas Geological Society (NTGS), and the agents, officers, servants, and employees of each, from all liability for any loss, damage, or injury sustained by me while involved in any way with the meeting except that each of the Southwest Section, AAPG, and NTGS is not released from such liability to the extent the same is caused by its actual negligence or willful misconduct. I have carefully read and understand this waiver and release.

X:		-		
Registration *Basic registration fee includes admission to all technical and poster sessions, exhibits, and the icebreaker. Basic registration is required to attend the field trip and short course. Payment must accompany registration form. No refunds after April 22 nd			*Mail To: North Texas Geological Society P.O. Box 1671 Wichita Falls, TX 76307 Phone: (940) 716-5100 (Craig Reynolds-Chair) *E-mail: craig@cobraogc.com	
Event	Cost	#	Total	jhickman@jlhgeo.com
Professional Member Registration:	\$295			On-line registration available at <u>www.swsaapg.org</u> or <u>www.ntgeologicalsociety.org</u>
Spouse/Guest Registration:	\$60			Payment Information
Additional Exhibitor Badges:	\$45			Payment Method
Student Member Registration:	\$50			Check Enclosed Credit Card
All-Convention Field Trip: • Seismic Scale Structure and Stratigraphy of the Arbuckle Mountains *Requires professional member registration	\$80			Credit Card Information Name on Card:
Short Course:	\$65			Card Number:
Practical Well-Log Applications – Dr. Jeff May All-Convention Luncheon:	\$45			Expiration Date:
Native son Allen Lazenby, Arbol-Houston, TX				Security Code:
DPA Luncheon:	\$45			Credit Card Billing Address:
Evening Event: ♦ Western Night with the Mavericks	\$45			
REGISTRATION TOTAL:				

