MISSISSIPPI GEOLOGICAL SOCIETY

Volume 67

No. 3

November 2018





www.missgeo.com

2018-2019 MGS MEETING SCHEDULE				
When	What/Who	Where		
September 13, 2018	Fall BBQ	Jackson Yacht Club-5:30pm		
October 11, 2018	Ezat Heydari and Kiana McFadden	River Hills – 11:30am		
November 8, 2018	ENERGY & POWER: SUPPLY & DEMAND Todd "Ike" Kiefer	River Hills – 11:30am		
TBD	TBD	TBD		
January 10, 2019	TBD	River Hills – 11:30am		
February 7, 2019	TBD	River Hills – 11:30am		
March 7, 2019	TBD	River Hills – 11:30am		
April 11, 2019	Boland Scholarship Awards	River Hills – 11:30am		
May 9, 2019	Spring Fling	Jackson Yacht Club- 5:30pm		



OFFICERS MEETINGS
September 11, 2018
October 9, 2018
November 6, 2018
January 8, 2019
February 5, 2019
March 5, 2019
April 9, 2019
May 7, 2019



MGS 2018-2019 BOARD OF DIRECTORS

Officers

President	Dr David Dockery III	MDEQ	ddockery@mdeq.ms.gov	(601) 961-5171
1st Vice President	Jimmie Sparks	MDEQ	jsparks@mdeq.ms.gov	(601) 961-5171
2nd Vice President	Joe Johnson	Spooner Petroleum	jjohnson@spoonercompanies.com	(601) 969-1831
Treasurer	Paul Parrish	MDEQ	pparrish@mdeq.ms.gov	(601) 961-5171
Webmaster	Steve Walkinshaw	Vision Exploration	steve@visionexploration.com	(601) 607-3227
Advertising	Matt Caton	Tellus Operating	mcaton@tellusoperating.com	(601) 898-7444
Editor	Matt Caton	Tellus Operating	mcaton@tellusoperating.com	(601) 898-7444

Boland Scholarship

President	David Dockery	MDEQ	(601) 355-4530
Secretary	Neil Barnes	Independant	
Members	Joe Johnson	Spooner Petroleum	(601) 969-1831
	Tony Stuart	Venture Oil & Gas	(601) 428-7725
	James Starnes	DEQ	
	Bob Schneeflock	Geodigital Consulting	(601) 853-0701
	Dave Cate	Pruet Oil	

Honorary Membership

Chairman	Charles H. Williams, Jr. Vaughey & Vaughey	(601) 982-1212
Members	Dave Cate	(601) 718-9397
	Vaughn Watkins	(601) 898-9347

MGS Representatives

AAPG	Maurice Birdwell	Independent	(601) 936-6939
GCAGS	Danny Harrelson	U.S. Army R&D	(601) 634-2685

Other

Environmental	John Ryan	Allen	(601) 936-4440
Historian	Stanley King	Independent	(601) 842-3539



PRESIDENT'S LETTER

Dr. David T. Dockery III, RPG



Ezat Heydari gave a great presentation at our October meeting on the volcanic ash that makes up much of the Basic City Shale Member of the Tallahatta Formation. This ash is in the form of opal-CT and the zeolite clinoptilolite. Those present found it very interesting, but many of you missed it. Maybe it was not on oil and gas or the Rover on Mars, but my recommendation to you is never miss a meeting when Ezat is speaking.

Now a setup for some disappointing professional news. In 1851, shortly after the California Gold Rush, the newly formed California State Legislature named John B. Trask as Honorary State Geologist. In 1853, the Legislature created the first California Geological Survey headed by Trask, who retained the title as State Geologist. In 1860, the Legislature created the first official Geological Survey of California and the Office of State Geologist with Josiah D. Whitney (for whom California's highest peak Mount Whitney is named) appointed as State Geologist. The California Geological Survey's name changed several times over its history, renamed in April of 1880 as the California State Mining Bureau, renamed as the Division of Mines in 1927, and as the California Division of Mines and Geology in 1962. In August of 2006, the Legislature reinstated the Division's name as the California Geological Survey within the Department of Conservation. On October 4, 2018, the Department's Director consolidated the California Geological Survey into a new blended Department of Conservation. Association of American State Geologists President Karen Berry (Colorado), shared with members a letter of resignation from California State Geologist John Parrish on October 5, 2018, as follows:

It is with deep regret that I must submit my resignation from the Association of American State Geologists, and the AASG-Foundation, effective immediately. As of yesterday noon, I was abruptly and unexpectedly terminated from the position of California State Geologist. The Director of the Department of Conservation, under which the California Geological Survey operates as a Division within the Department, is moving to consolidate and "blend" all the divisions within the Department. Removing this State Geologist is a first step in that process of homogenization. Plans for my replacement have not yet commenced.

It has been my very great honor to have been a member of the AASG for the past 13 years and to have participated in many of the organization's annual events and causes. Jennifer and I shall miss meeting with all of you at exciting locations across the country—your graciousness has always been so welcomed. Please convey our appreciation and farewell to the other State Geologists.



PRESIDENT'S LETTER

Dr. David T. Dockery III, RPG



Con Maloney, Vaughan Watkin, and Gwin Dockery Wyatt at the April 12, 2018, Mississippi Geological Society noon meeting.

My thoughts were "What state had benefitted more from geology than California?" My family and the Mississippi Geological Survey/Office of Geology have important California connections. California gained a significant increase in its population and status due to the Gold Rush of 1849. My sister's name is Gwin spelled with an "i" rather than an "e." My mother's mother came up with the name in honor of her mother's mother whose maiden name was Gwin. Gwinville is the name of a town and oil and gas field in Jefferson Davis County. Dr. William McKendree Gwin practiced medicine in Clinton, Mississippi, until 1833, when he became the United States Marshal for Mississippi. He moved to California in 1849 and participated in the 1849 California Constitutional Convention. Gwin became one of the first two U.S. senators elected from California. In 1867, he purchased the Gwin Mine in Paloma, California, which yielded millions of dollars in gold. Dr. Gwin's first cousin Col. William McNichols Gwin of Lawrence County, Mississippi, started out for California with his family, but his wagon broke down in Bogue Chitto, Mississippi, where he stayed put (my kin). His daughter Sarah A. Gwin was my mother's mother's mother and namesake of my sister. Spelled out, the connection is, Sarah A. Gwin married A. J. Martin and had daughter Ida Mae Martin who married Maurice Richardson and had daughter Imogene Richardson who married Roland Somers and had daughter Jean Somers who married David T. Dockery Jr. who had my sister Gwin and me.



PRESIDENT'S LETTER

Dr. David T. Dockery III, RPG

The second California connection concerns State Geologist Eugene Hilgard, who served as the fourth (1858-1866) and sixth (1870-1872) state geologist of Mississippi. I am the seventeenth state geologist if you count Hilgard twice. Hilgard published a book on the state's geology in 1860 entitled Report on the Geology and Agriculture of the State of Mississippi. It was during his tenure in Mississippi that he developed many of his ideas on soil science. Hilgard moved to the University of California at Berkeley where he served as Professor of Agriculture and Botany and later as Director of Experiment Stations. He is widely recognized as the "Father of Soil Science" and the "Father of the California Wine Industry." Hilgard's work applied geology not only to California's mineral wealth and but also to the state's agricultural wealth and continues to do so.

If not for the California Gold Rush, Col. Gwin's daughter Sarah would have married someone in Lawrence County, and my sister and I (along with many others) would not exist. The same story played out in the families of some 150,000 people who moved west in search of gold. Another 150,000 came to California by sea from Latin America, Europe, Australia, and China. The geology of California changed the state, the nation, and the world.



NOVEMBER SPEAKER

Todd "Ike" Kiefer



Todd Kiefer is a 25-year military officer, Naval aviator, EA-6B Prowler pilot. 8 times deployed to Middle East and Southwest Asia. 22 months on the ground in Iraq. 3 years as pentagon strategic planner on Joint Staff. 3 years as faculty instructor of warfighting and strategy and CJCS Chair at the Air War College. Degrees in physics, strategy, and history. Operational experience in military command, electronic and information warfare, military strategy and war planning, operational testing of software and avionics, aviation training, crash investigation, contract management. Published papers on energy security and biofuels. Literature research focused on primary energy, alternative energy, photosynthesis, electrification and economic development, international relations theory and geopolitics, demographic trends, climate and environment, water and resource scarcity, biophysical economics, EROI. Currently managing a local power company and a rural water association.



GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES

for the GCAGS JOURNAL



The peer-reviewed journal for Gulf Coast geoscience.

Open Access • Fast Track • No Page Charges

The GCAGS Journal, the Journal of the Gulf Coast Association of Geological Societies, is soliciting manuscripts for the 2019 edition (our 8th volume). This peer-reviewed journal is focused on publishing studies of the geology of the onshore and offshore Gulf of Mexico. For the 2019 Journal, we are soliciting manuscripts particularly focused on the following themes, although other themes are welcome: Deepwater Gulf, Modern Technologies, Shale Play Assessment, Oil and Gas Field Studies, and the Mexico portion of Gulf of Mexico Basin.

Please submit an extended abstract of at least 600 words, including 1–2 representative figures, to the GCAGS Journal Editor, Bob Merrill, at rmerrill@catheart.com by December 15, 2018. Once topic is approved, a full manuscript must be submitted by April 2, 2019. GCAGS Convention presentations of Journal submissions are encouraged but not required. The 2019 Convention is scheduled for Houston, Texas.

Please visit <u>www.gcags.org</u> for open access to our seven previous volumes.

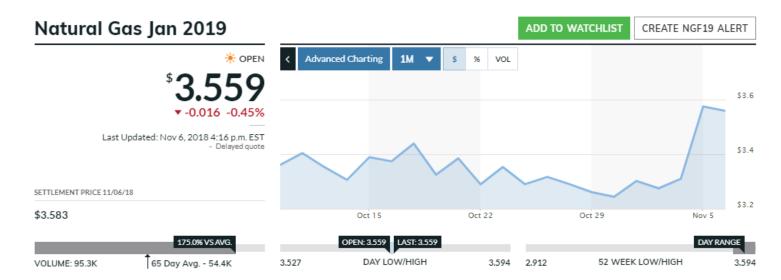
INTERESTED IN SERVING AS AN ASSOCIATE EDITOR?

The GCAGS Journal, a peer-reviewed Journal published yearly by the Gulf Coast Association of Geological Societies, is soliciting member societies for associate editors. You would be involved with managing the peer-review process for 1 to 3 manuscripts that are submitted for publication in the GCAGS Journal. Ideally associate editors will contribute their local knowledge and expertise to the editorial process. If you are interested in being an Associate Editor for the GCAGS Journal, please contact Bob Merrill at rmerrill@catheart.com.



CURRENT PRICES





Marketwatch





JOB POSTING



Sr. Geologist/Reservoir Engineer-01012791 Description

Do you have a passion for oil and gas exploration & development, in a variety of geographies, and a desire to live in the Pacific Northwest? As a Senior Geologist – Reservoir Engineer located at Weyerhaeuser's Seattle Headquarters, your primary responsibility will be oil and gas prospect generation and marketing, along management of our royalty production streams, on Weyerhaeuser's 13 million mineral acres, underlying our timberlands in continental United States.

In this role, you will have access to an extensive geologic and seismic data sets and you will work with our Senior Geophysicist and Land Manager to generate prospects and promote drilling activity, primarily in the North Louisiana Salt Basin and Gulf Coast regions. In this position, you will also be responsible for the petrophysics and economic modeling associated with prospect generation. This role will require a high degree of proficiency with the preparation of prospect marketing packages, and with presentations to a wide variety of oil and gas companies and conventions. Additionally, you will also manage our royalty production stream, including annual reserve reporting and revenue forecasting. You will also have the responsibility to assess oil and gas potential in a wide variety of geologic terrains, and to support real estate and timberlands divestitures and acquisitions. We expect you to use your strong interpersonal, communication, and conflict resolution skills as you work to create strategic plans and meet financial objectives for your areas of responsibility.

At Weyerhaeuser we believe trees are a remarkable resource that can, and should, be managed responsibly to make a range of products that meet human needs, while also providing recreation, wildlife habitat, and other important ecosystem benefits. For more than a century, we've been building our reputation as a leader in sustainable forest products.

Roles & Responsibilities

- Responsible for prospect petrophysics, decline curve analysis and economic modeling.
- Manages royalty production streams, including reserve reporting and revenue projections.
- Generates oil and gas prospects on Weyerhaeuser lands, along with marketing displays and presentations, in close collaboration with the Senior Geophysicist; utilizing our extensive geophysical and geologic data bases.
- · Collaborates with the Oil and Gas Team to identify potential industry partners, and to promote exploration activity.
- Responsible, along with the Oil and Gas Team, for expert prospect presentation and promotion to a wide variety of oil and
 gas companies, investors, and management.
- Responsible for geologic and economic evaluations of oil and gas lease offers, in partnership with the Senior Geophysicist and Land Manager.
- Responsible for geologic and economic assessment of oil and gas potential on all Weyerhaeuser lands, including recommendations regarding acquisitions and divestitures.
- · Collaborates with Operations Team in evaluating performance and compliance with lease contracts
- Partners with the Oil and Gas Team for the creation of annual budgets and strategic plans.
- · Responsible for the attainment of annual leasing goals and financial objectives within area of responsibility.
- Displays strong excellent interpersonal, communication and conflict resolution skills.
- Reports to Director, Oil and Gas, Energy and Natural Resources.

Qualifications

Experience: We place an emphasis on our candidate's skills and drive to get the job done. We require demonstrated experience in the upstream oil and gas industry, with an emphasis on prospect generation and marketing, in the North Louisiana Salt and Gulf Coast Basins. A background in petrophysics and petroleum economics are also essential skills for this position.

Education: Bachelor's degree or higher, Master's preferred, in geology or closely related field;

Technical Skills: eight or more years' experience in in prospect generation and marketing. Full working knowledge of Petra geologic software, or equivalent, is required. Candidates with expertise in salt tectonics will receive preferential consideration. Experience with petroleum economic software, e.g., PHDWin, for decline curve analysis, economic evaluations, and volume/revenue projections is also required.



MONTHLY POST

Dr. David T. Dockery lll RPG

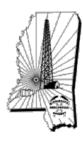
USGS HIGH-RESOLUTION AIRBONE GEOPHYSICAL SURVEY OF THE MISSISSIPPI RIVER VALLEY ALLUVIAL AQUIFER

David T. Dockery III, RPG

This November (2018) a low-level helicopter will fly over parts of Mississippi and six other states in the Mississippi Alluvial Plain (MAP) towing an electromagnetic instrument in a cylinder called a bird. The helicopter will fly along east-west lines at 200 feet above the surface, with the bird 100 feet beneath (Figure 1).



Figure 1. CGG Resolve helicopter system in Greenwood, Mississippi.



MONTHLY POST

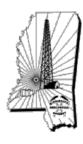
Dr. David T. Dockery lll RPG

This survey, contracted to CGG Airborne of Ontario, Canada, will allow the USGS to develop a high-resolution, three-dimensional representation of the Mississippi River Valley Alluvial aquifer (MRVA) that will improve the accuracy of a groundwater use and availability model being developed by the USGS in cooperation with MDEQ Office of Land and Water Resources. The survey's continuous resistivity profiling uses the electrical properties of near-surface materials to map the thickness of high-resistivity, coarse-grained, freshwater-bearing, alluvial sands from low-resistivity, fine-grain clay, silt, and bedrock. Airborne electromagnetic (AEM) surveys were historically used to map mineral deposits but are increasingly used for geologic and hydrologic studies.

Preceding the airborne survey, in June 2016, a waterborne survey was conducted along 180 km (111 miles) of three rivers, Tallahatchie, Quiver, and Sunflower River. These surveys were conducted with a direct-current resistivity system towed behind a motorboat proceeding up stream (Figure 2).



Figure 2. Waterborne resistivity surveys on the Quiver River in Sunflower County (left) and the Tallahatchie River in Leflore County (right).



MONTHLY POST

Dr. David T. Dockery lll RPG

Preceding the airborne survey, in June 2016, a waterborne survey was conducted along 180 km (111 miles) of three rivers, Tallahatchie, Quiver, and Sunflower River. These surveys were conducted with a direct-current resistivity system towed behind a motorboat proceeding up stream (Figure 2).

A land-based resistivity survey was conducted in August 2016 using a capacitively-coupled resistivity system, consisting of a series of seven electrodes pulled behind a vehicle along dirt and gravel roads (Figure 3; almost like pulling MDEQ's geophysical logging tool down a dirt road).



Figure 3. ATV pulling an array of electrodes for mapping in the vicinity of Steiner (left) and view of the Ohmmapper system in Sunflower County (right).



104°0'0"W

MONTHLY POST

Dr. David T. Dockery lll RPG

Airborne electromagnetic three-dimensional surveys have proven successful in the North and South Platte River valleys (western Nebraska) in revealing aquifer geometries in the paleochannels of the ancestral Platte River (Figure 4). Similar paleochannels exist in the Mississippi River Valley Alluvial aquifer.

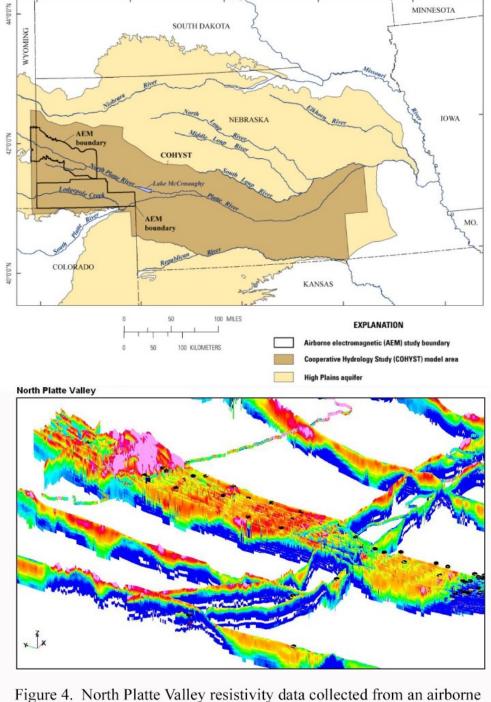


Figure 4. North Platte Valley resistivity data collected from an airborne electromagnetic survey. Areas with high resistivity are depicted in warm colors (reds) and low resistivity as cool colors (blues).



69th Annual Gulf Coast Association of Geological Societies 2019 GCAGS Convention



October 23-25, Marriott Westchase, Houston

Hosted by the Houston Geological Society and the GCSSEPM General Chair: Mike Erpenbeck, Vice Chair: Larry Bartell, GCAGS President: Deborah Sacrey

Submit an Oral or Poster Abstract by March 4, 2019

Convention Themes

- 1. Unconventional GOM Mudrocks and Shale Plays
 - Austin Chalk, Eagle Ford, Haynesville, Eaglebine and other plays
- Onshore GOM Conventional Plays, Discoveries, and Case Studies
 Louisiana and Texas Wilcox, Miocene, Yegua, and other trends
- 3. Offshore GOM Exploration and Production Studies
 - Cretaceous, Miocene, Deepwater Wilcox Plays, Risking, and Dry Hole Evaluation
- 4. Over the Border: Mexico Geology and Exploration, and Caribbean Exploration Mexico, Cuba, Belize, Trinidad, Offshore Central America, Regional Studies
- 5. Structural Geology, Gravity, and Magnetic Case Studies
 - Ground Penetrating Radar Imaging, Use of Drones, and Lidar Imaging

- 6. Gulf Coast Environmental Geology
 Subsidence & Flooding Impact, Groundwater
 Quality, Public Education Outreach,
 Environmental Studies, and Professional Licensing
- Petroleum Engineers and Geologists Working Together for a Better Answer Estimating Reserves, GeoModeling, Economics, Waterflooding, and Permeability Enhancement
- 8. Seismic Technology and Salt Tectonics Depth Migration, Subsalt Processing, AVO, Seismic Attributes, and Shallow Hazards
- 9. Understanding Big Data and Computer Aided Interpretation

Machine Learning, Visualization, Augmented Intelligence, and Pattern Recognition

10. The Road to Business Success

Deals, Financing, Starting Own Company, Young Professional Careers, and Consulting

2019 Convention Oral and Poster abstracts of up to 300 words must be submitted to the Technical Chair, Linda Sternbach, by March 4, 2019. Send abstract and contact info in a Word document to linda.sternbach@gcagshouston.com. Authors will receive notification of acceptance by March 25, 2019

If you'd like to publish in the GCAGS Journal, the peer-reviewed journal of Gulf Coast geoscience, submit an extended abstract of at least 600 words, including 1–2 representative figures, to the GCAGS Journal Editor, Robert Merrill (rmerrill@catheart.com) by December 15, 2018.

www.gcagshouston.com



BOLAND SCHOLARSHIP WATCH

Faculty & Students,

This is a new year and the Mississippi Geological Society along with the Boland Scholarship Fund would like to remind you that we want to honor the most outstanding overall students for the 2018-2019 year.

Each year, the Boland Scholarship awards 1 student from each institution a check that rewards students for their hard work and dedication to the Geosciences and their community.

We look forward to a great year and hope to see you at our monthly meetings.

Best Regards,

Matt Caton Editor











Mississippi Academy of Sciences Geology and Geography Division

83rd Annual Meeting, 21-22 February 2019

Thad Cochran Center at the

University of Southern Mississippi

Call for Abstracts: Deadline 11/15/18

We are soliciting presentations on any earth science topic, including geology, geography/GIS, paleontology, hydrology, geological/geotechnical/environmental/water-resources engineering, and environmental science.

To Submit Go To: https://msacad.org/submit-on-line

Cash awards for 1_{st} (\$100), 2_{nd} (\$50), and 3_{rd} (\$50) place undergraduate and graduate student presentations, thanks to the generous support of the Mississippi Geological Society

GEOLOGY POST

ARTICLES, PAPERS or NEWS?

ATTENTION!!!!! Industry, Professors and Students:

I am adding a dedicated section that includes more content from the industry and our schools.

Submissions can include anything from professional papers, thesis abstracts, job opportunities to pictures. Anything!!!!

If you have any information or news you would like to share with the Society **PLEASE** email them to the MGS Editor at:

mcaton@tellusoperating.com

Thanks & Regards,

Matt Caton Editor

GEO LINK POST

USGS TAPESTRY OF TIME AND TERRAIN http://tapestry.usgs.gov The CCGS is donating to all of the 5th and 6th grade schools in the Coastal Bend. Check it out—it is a spectacular map. You might want a framed one for your own office. The one in my office has glass and a metal frame, and it cost \$400 and it does not look as good as the ones we are giving to the schools. Call Owen 510-6224 if you want one for your office for \$150. Duncan, Mike, Chris, Dave, Bob Randy, Seb., Kevin, Ken, Craig, Patrick, Robert.

FREE TEXAS TOPO'S http://www.tnris.state.tx.us/digital.htm these are TIFF files from your state government that can be downloaded and printed. You can add them to SMT by converting them first in Globalmapper. Other digital data as well.

FREE NATIONAL TOPO'S http://store.usgs.gov/b2c_usgs/b2c/start/(xcm=r3standardpitrex_prd)/.do go to this webpage and look on the extreme right side to the box titled TOPO MAPS DOWNLOAD TOPO MAPS FREE.

http://www.geographynetwork.com/ Go here and try their top 5 map services. My favorite is 'USGS Elevation Date.' Zoom in on your favorite places and see great shaded relief images. One of my favorites is the Great Sand Dunes National Park in south central Colorado. Nice Dunes.

<u>http://antwrp.gsfc.nasa.gov/apod/astropix.html</u> Astronomy picture of the day — awesome. I click this page everyday.

http://www.spacimaging.com/gallery/ioweek/iow.htm Amazing satellite images. Check out the gallery.

http://www.ngdc.noaa.gov/seg/topo/globegal.shtml More great maps to share with kids and students.

www.geo.org Don't forget we have our own web page.

http://micro.magneet.fsu.edu/primer/java/scienceoptiscu/owersof10/

http://asterweb.jpl.nasa.gov/galery/default.htm Great satellite images of volcanoes

http://terra.nasa.gov/gallery/ More here

<u>www.ermapper.com</u> They have a great free downloadable viewer for TIFF and other graphic files called ER Viewer.

www.drillinginfo.com This is an incredible (subscription) well and completion data service for independents. Can be demo'ed for free.

<u>http://terrasrver.com/</u> Go here to download free aerial photo images that can be plotted under your digital land and well data. Images down to 1 meter resolution, searchable by Lat Long coordinate. Useful for resolving well location questions.

http://www.fs.fed.us/gpnf/volcanocams/msh/ This is a live cam of Mt. St. Helens refreshed every 5 minutes. At the bottom are old videos of past eruptions in this cycle. It is worth a watch especially now.



MGS HONORARY MEMBERS

Esther Applin*

Verne Culbertson *

David C. Harrell*

Dudley J. Hughes*

Walter P. Jones*

Winnie McGlammery*

Maurice E. Miesse*

Marvin E. Norman*

Thurston Connell Rader*

Henry Toler*

Charles H. Williams

David Cate

Bob Schneeflock

Paul Applin*

H. Leroy Francis*

Oleta R. Harrell*

Urban B. Hughes*

Harold Karges*

Thomas McGlothin*

Emil Monsour*

Marvin L. Oxley*

Baxter Smith*

H. Vaughn Watkins

Jerry Zoble

Stanley King

Lawrence F. Boland*

Jim Furrh*

Ralph Hines*

Wendell B. Johnson *

Wilbur H. Knight*

Frederic F. Mellen*

William H. Moore*

Richard R. Priddy*

Harry V. Spooner

Stewart W. Welch*

Julius Ridgeway

Dr. David T. Dockery III

^{*} deceased

MEMBERSHIP APPLICATION / RENEWAL FORM

MISSISSIPPI GEOLOGICAL SOCIETY P.O. BOX 422, JACKSON, MISSISSIPPI 39205-0422

2018-2019

Membership year is June through May

New Membership (\$20/yr)	Renewal (\$20/yr)	Student (FREE)	Associate (\$20/yr)
Boland Scholarship Fund	l Donation \$	Total Amount Enclos	sed \$
Last Name:	First:		MI:
Mailing Address:			
Office Phone:	Home Phone:	FAX	X:
E-mail Address:			
College/University Attended:			
Degree(s) Obtained and Year	(s) Awarded:		
Professional Associations, Ce	ertifications, & Licenses:		

MGS ADVERTISING ORDER FORM

September 2018 – May 2019

I. Bulletin Advertisements:

Size	Rate/Year	Amt. Remitted
Full Page Ad (6" x 8")	\$500	\$
1/2 Page Ad (6" x 4")	\$300	\$
1/4 Page Ad (3" x 4")	\$200	\$
Business Card Ad (1 1/2" x 3")	\$100	\$
Professional Listing (1/2" x 3")	\$ 50	\$

II. Web Page Advertisements (www.missgeo.com):

Type of Web Page Ad	Rate/Year	Amt. Remitted
Front Page Sponsor		
(Banner Ad – limit of 5)	\$500	\$
Second Page Banner Ad	\$250	\$
Professional Listing/Link	\$100	\$

(Note: Please contact Steve Walkinshaw at (601) 607-3227 or mail@visionexploration.com for details concerning placing your ad on the MGS web site.)

Total Remitted \$_____

Please make checks payable to the Mississippi Geological Society. If you have any questions, contact Matt Caton at (601) 898-7444 or mcaton@tellusoperating.com

MILBIRD RESOURCES, LLC Oil & Gas Exploration

Maurice N. Birdwell

Managing Partner AAPG Certified Petroleum Geologist Reg. Prof. Geol. Ark. La. Miss. Tex

2043 Oak Ridge Drive Pearl, MS 39208

601.936.6939

mnbirdwell@comcast.net



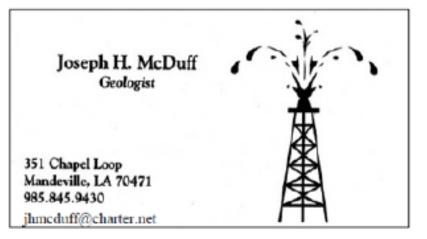
WATTS C. UELTSCHEY ATTORNEY

OFFICE (601)960.6871 FAX (601) 960.6902

E-MAIL WATTS@BRUNINI.COM | WWW.BRUNINI.COM

BRUNINI, GRANTHAM, GROWER, & HEWES, PLLC ATTORNEYS AT LAW

190 EAST CAPITOL STREET SUITE 100 JACKSON, MS 39201 P.O. DRAWER 119 JACKSON, MS 39205





MGS PAST PRESIDENTS

_			
1939-1940	Henry N. Toler	1973-1974	Larry Walter
1940-1941	Urban B. Hughes	1974-1975	W. E. "Gene" Taylor
1941-1942	J. Tom McGlothlin	1975-1976	Jerry E. Zoble
1942-1943	Dave C. Harrell	1976-1977	P. David Cate
1943-1944	K. K. "Bob" Spooner	1977-1978	Sarah Childress
1944-1945	L. R. McFarland	1978-1979	Les Aultman
1945-1946	J. B. Story	1979-1980	Philip R. Reeves
1946-1947	Frederic F. Mellen	1980-1981	Marshall Kern
1947-1948	H. Lee Spyres	1981-1982	Stephen Oivanki
	Robert D. Sprague	1982- 1983	James W. "Buddy" Twiner
1948-1949	Robert D. Sprague	1983- 1984	Charles H. Williams
1949-1950	E. T. ""Mike" Monsour	1984- 1985	C. Kip Ferns
1950-1951	J. Tate Clark	1985-1986	Steven S. Walkinshaw
	Charles E. Buck	1986-1987	J. R. ""Bob" White
1951-1952	George W. Field	1987-1988	Harry Spooner
1952-1953	James L. Md11in, Jr.	1988-1989	Stanley King
1953-1954	Wilbur H. Knight	1989-1990	Stan Galicki
1954-1955	A. Ed Blanton	1990-1991	E. James Files, Jr.
1955-1956	Gilbert A. Talley	1991-1992	Stephen L. Ingram, Sr.
1956-1957	Ben Ploch	1992-1993	Michael Noone/Stanley King
1957-1958	Emil Monsour	1993-1994	Brian Sims
1958-1959	Charles Brown	1994-1995	C. W. "Neil" Barnes
1959-1960	M. F. Kirby	1995-1996	Lester Aultman
1960-1961	Rudy Ewing	1996-1997	Jack S. Moody
1961-1962	Xavier M. Franscogna	1997-1998	George B. Vockroth
1962-1963	Robert B. Ross	1998-1999	Rick L. Ericksen
1963-1964	William A. Skees	1999-2000	Stanley King
1,00 1,01	Marvin Oxley	2000-2001	John C. Marble
1964-1965	James F. Bollman	2001-2002	Andrew T. Sylte
1965-1966	Sankey L. Blanton	2002-2003	Aaron Lasker
1966-1967	Alan Jackson	2003-2004	John G. Cox
1967-1968	Julius M. Ridgway	2004-2005	James E. Starnes
1968-1969	Edward D. Minihan	2005-2006	Todd Hines
1969-1970	Kevin E. Cahill	2006-2007	Bob Schneeflock
1970-1971	John Lancaster	2007-2008	Tony Stuart
1971-1972	Larry Boland	2008-2009	Lisa Ivshin
1972-1973	Charles Barton	2009-2010	Joe Johnson
19/2-19/3	Charles Barton	2010-2011	Brian Sims
		2011-2012	Stanley King
		2012-2013	Jim Files
		2013-2014	Neil Barnes
		2014-2015	Ezat Heydari
		2015-2016	Jack Moody
		2016-2017	Cragin Knox
		2017-2018	David Hancock
		201, 2010	_ = =