Volume 60 No. 1 August 2011

MISSISSIPPI GEOLOGICAL SOCIETY

eBulletin

missgeo.com

MGS 2010-2011 BOARD OF DIRECTORS

Officers

President	Stanley King	Independent	rox52doc @aol.com	(601) 842-3539
1st Vice President	Jim Files	Geodigital Consulting	jfgd @comcast	(601) 853-0701
2nd Vice President	Neil Barnes	Tellus Operating	nbarnes @tellusoperating.com	(601) 898-7444
Secretary	Matt Caton	Tellus Operating	mcaton @tellusoperating.com	(601) 898-7444
Treasurer	Bill Bagnall	Bureau of Land Management	william_bagnall @blm.gov	(601)-977-5417
Webmaster	Steve Walkinshaw	Vision Exploration	steve @visionexploration.com	(601) 607-3227
Advertising	Matt Caton	Tellus Operating	mcaton @tellusoperating.com	(601) 898-7444
Editor	Joe Johnson	Tellus Operating	mgs @treetop.us.com	(601) 898-7444

Boland Scholarship

President	Stanley King	Independent	(601) 842-3539
Secretary	Dave Cate	Pruet Oil	(601) 948-5279
Members	Ray Lewand		
	Tony Stuart	Venture Oil & Gas	(601) 428-7725
	James Starnes	DEQ	
	Bob Schneeflock	Geodigital Consulting	(601) 853-0701

Honorary Membership

Chairman	Charles H. Williams, Jr.	Vaughey & Vaughey	(601) 982-1212
Members	Dudley J. Hughes	Hughes South Corp.	(601) 420-9892
	E. Ralph Hines	Moon-Hines	(601) 572-8300
	Jerry Zoble	Independent	

MGS Representatives

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

Other

Environmental Section	Ken Ruckstuhl	Environmental Mgt. Serv.	(601) 992-8233
Historian	Stanley King	Independent	(601) 842-3539

PRESIDENT'S LETTER

Stanley King

Being a third generation pack-rat (and longtime Society historian) I looked back in my files and found my first President's letter, which appeared in the July, 1988, Society Bulletin. In that letter I briefly mentioned some items that were of concern for the future of the Society, as well as some planned activities. In the intervening twenty-three plus years since that letter, we as a Society have weathered many storms but have survived and thrived nonetheless. That we have come through many trials is a testament to everyone who has served, and who continues to serve, you and your society as officers and committee chairs. Thank you to those who have agreed to serve as in those positions with me this coming year—I look forward to a busy as well as productive year.

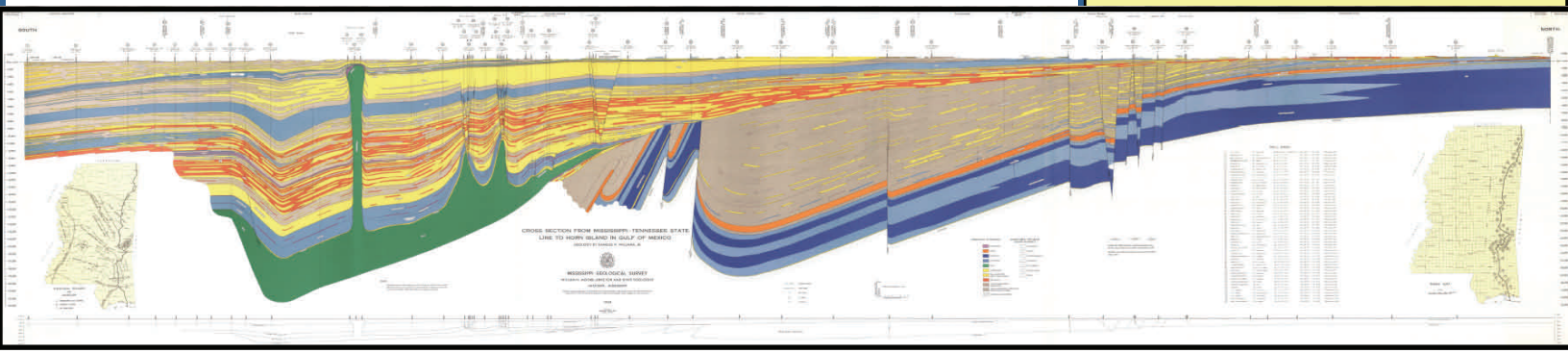
Elsewhere in this bulletin you will find a listing of dates of the Society's functions for the coming year. Mark your calendar for these events and plan to attend. From the Fall Barbeque to the Spring Fling, with all the luncheon meetings in between, your Society functions are best when you attend. Thank you.

In the past there has been a bit of confusion as to students' dues and as well as charges for them at functions. At its last meeting, the officers of your Society voted to abolish dues for students as well as charges for them for our functions. So, faculty and department heads, please disseminate this information to your geology majors and please encourage them to send their email information so we can get them on the bulletin mailing list. The future of our Society rests in continuing to reach out to those who will one day be writing these president's letters.

It is now time to renew your Society dues for the 2011-2012 year. I know many of you wait to do so, but avoid the rush and go ahead take care of it. Dues are due beginning on June 1st of each year.

I'm sure you each have gotten some sort of announcement, either email or snail mail, of the GCAGS convention being held October 16 thru 19, 2011, in Veracruz, Mexico. This venue represents a historic departure for GCAGS conventions, being the first one held outside the U.S. The convention website contains all important information, as well as pertinent links. American Airlines has a discounted flight from DFW to Veracruz should you be interested. It, too, has a link on the website. Announcement brochures will also be available at the Fall Barbeque. It should prove to be an interesting convention.

Looks like I'm near the bottom of the page, so I'll close…I look forward to seeing you at the Fall Barbeque on Thursday, September 8 at the Yacht Club!



MGS

In This Issue:

MGS MEETING SCHEDULE		
When	**What/Who**	**Where**
September 8, 2011	Fall BBQ	Jackson Yacht Club-5:30pm
October 13, 2011	TBD	River Hills – 11:30am
November 9, 2011	TBD	River Hills – 11:30am
December ?, 2011	Christmas Party and Dance	Colonial Country Club
January 12, 2012	TBD	River Hills – 11:30am
February 9, 2012	TBD	River Hills – 11:30am
March 8, 2012	TBD	River Hills – 11:30am
April 12, 2012	Boland Scholarship Awards	River Hills – 11:30am
May 10, 2012	Spring Fling	Jackson Yacht Club– 5:30pm

OFFICERS MEETINGS
August 4, 2011
September 1, 2011
October 6, 2011
November 3, 2011
December 1, 2011
January 5, 2012
February 2, 2012
March 1, 2012
April 5, 2012
May 3, 2012

MGS LUNCHEON SPEAKER:

No speaker this month.

Please come and join us for the MGS Fall BBQ
at the Jackson Yacht Club in Ridgeland, MS
on Sept. 8th 2011

Your MGS yearly dues are due!

$20/year
Students are FREE!!

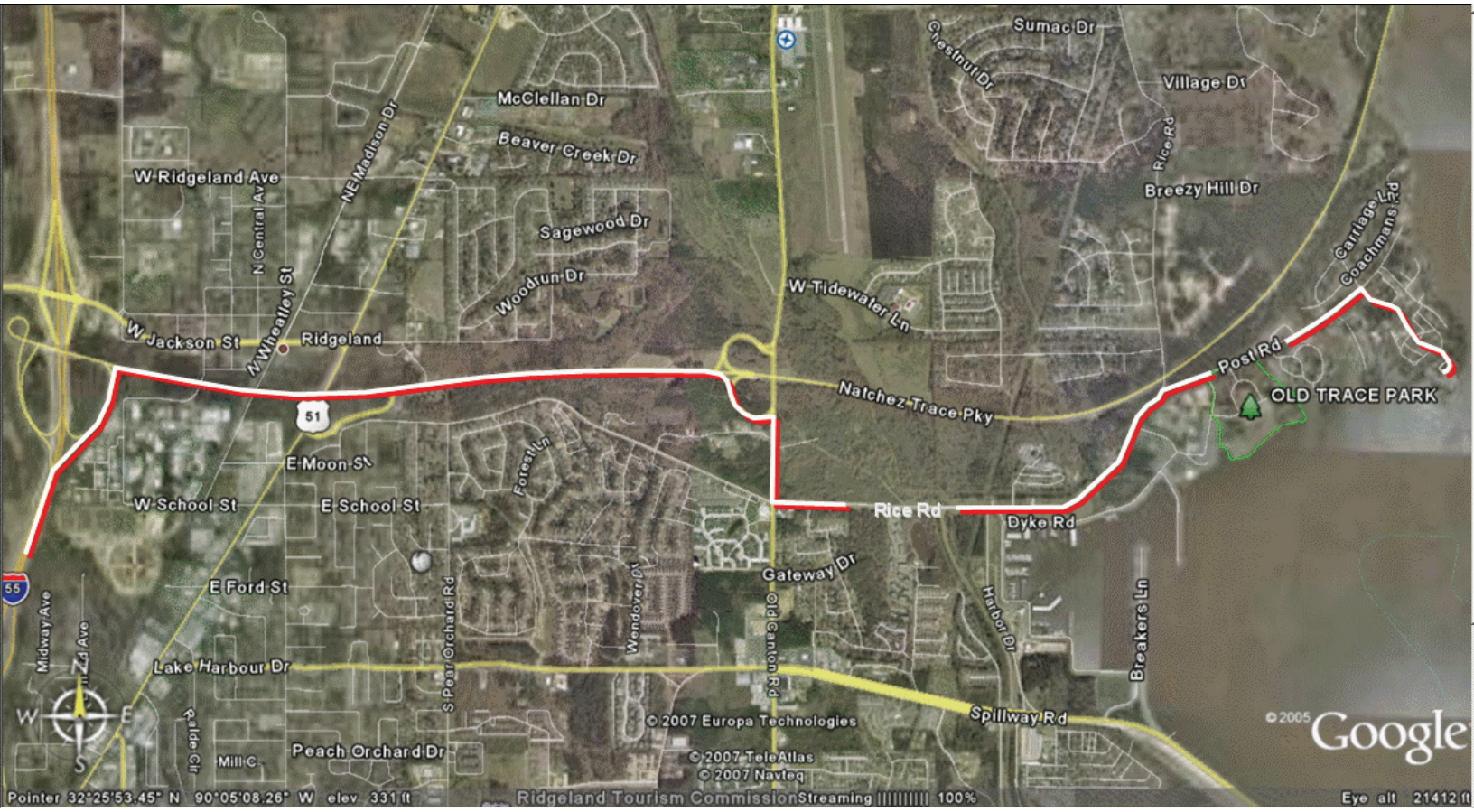
Jackson Yacht Club

2011 MGS Fall BBQ

Thursday, Sept. 8th
5:30 PM – 8:30pm

BBQ & Trimmings
Keg & Cash Bar

$15 per person
(Students are FREE)



Driving North or South on I-55:

Exit I-55 at Natchez Trace Parkway (exit #105A) and continue to stop sign, turn onto Parkway at stop sign to Tupelo (east), continue to Madison/ Ridgeland/Ross Barnett Reservoir exit (2.0 miles), exit right and continue to stop sign, turn right (south) at stop sign onto Old Canton Road, continue to traffic light (0.2 mile), turn left (east) at traffic light on Rice Road, continue (1.3 miles) to Post Road (3 way stop), turn right (east) at 3 way stop sign and continue to Yacht Club Road (0.7 mile), turn right (south) on Yacht Club Road and continue to end of road. Jackson YC is located on the southwest shore of Ross Barnett Reservoir in Madison County Mississippi.

AMELIA RESOURCES

Tuscaloosa Marine Shale

The Significance of Resistivity

AMELIA RESOURCES

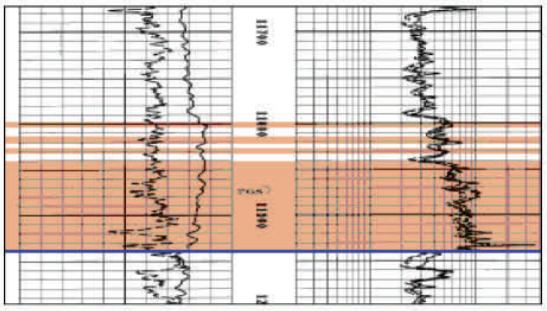
Discussion

Resistivity is one well log parameter that exhibits variability across the Tuscaloosa Marine Shale (TMS) Play. Higher resistivities, averaging 7 ohm-m, exist consistently across the area of the Louisiana-Mississippi state line in Wilkinson and Amites Counties, West and East Feliciana, St. Helena, and Tangipahoa Parishes. To the east in Washington Parish, resistivities are lower in the 2.5 ohm-m range. To the west in Rapides and Vernon Parish, resistivities average 3-5 ohm-m.

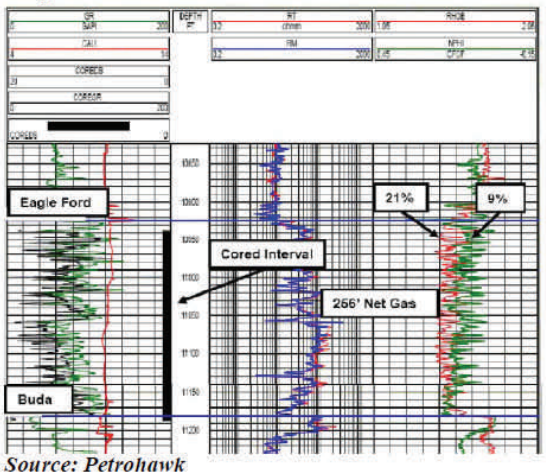
Resistivities in the Eagle Ford Shale of South Texas are much higher than those in the TMS mostly due to the abundance of calcareous material. Resistivities can be influenced by numerous factors and the reason for the variance in the TMS is still unknown.

The TMS sequence stratigraphically represents part of the Transgressive Systems Tract (TST) of the "A" Sequence. The top of the TMS is more marine than the base and subsequently, the basal portion tends to be more silty and calcareous. In the deeper portion of the play near the Lower Cretaceous Shelf Margin, the basal portion becomes very calcareous and is known locally as the Pilot Lime. An increase in silt and calcareous material would likely result in higher resistivities.

Tuscaloosa Marine Shale



Eagle Ford Shale – S. Texas

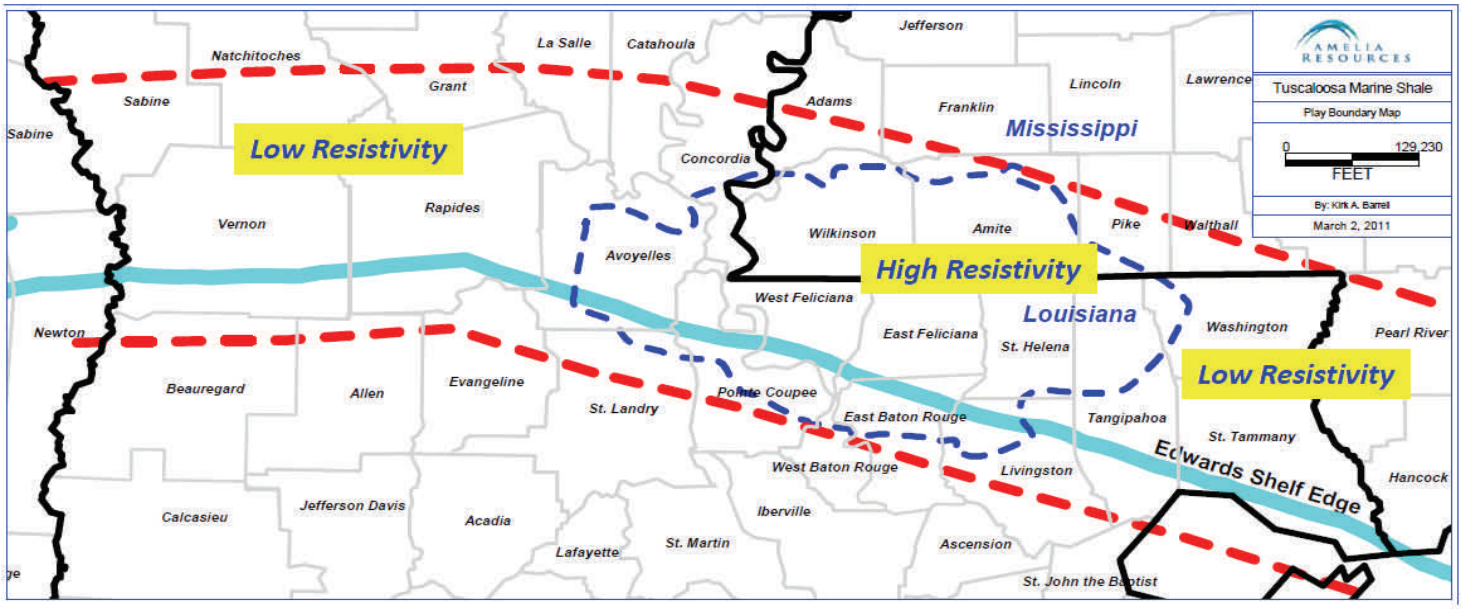


Source: Petrohawk

Contributed by:
MGS Editor

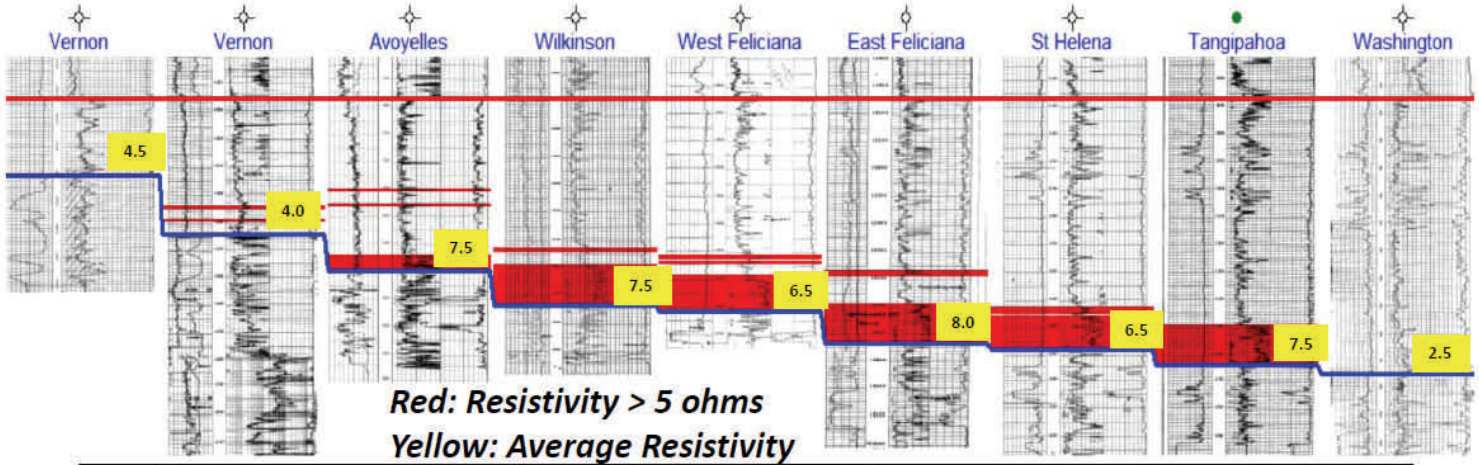
Tuscaloosa Marine Shale

Play Boundary Map – Resistivity Trends



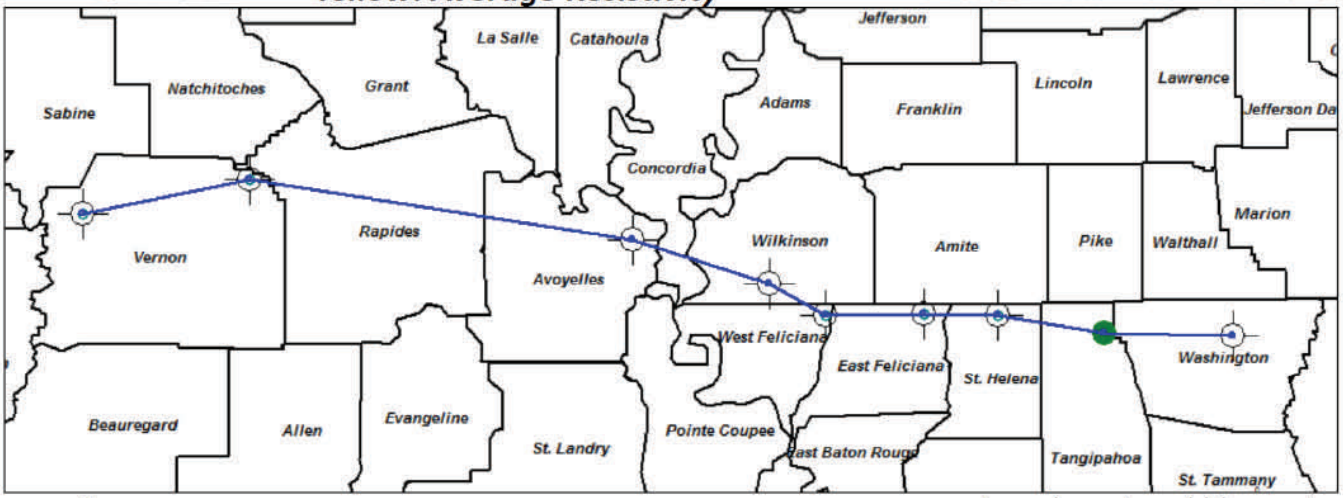
Regional Strike Stratigraphic Cross Section

Tuscaloosa Marine Shale – Average Resistivities



Red: Resistivity > 5 ohms

Yellow: Average Resistivity



Kreis and Costa, in their 2005 paper "Hydrocarbon Potential of the Bakken and Torquay Formations, Southeastern Saskatchewan", address the variabilities of resistivity in the Bakken Formation.

> *In places, the Upper and Lower Member shales of the Bakken Formation show very high resistivity values (Figures 3 and 4) that are attributed to the presence of oil which has replaced conductive pore waters. With continued oil replacement, oil saturation increases to produce progressively higher formation resistivity values. Other rock characteristics such as mineralogy, porosity, tortuosity, and the salinity of water within pore volume also contribute to the resistivity-log response of the shale, but these parameters are apparently secondary to the presence of oil in the shales (Schmoker and Hester, 1990). Although resistivity values do not distinguish whether oil has been generated in situ within the shales at a given location or has migrated into or within the shales, extensive Bakken core research by Schmoker and Hester (1990) has indicated that a resistivity value of greater than 35 ohm-m coincides with the onset of observable oil generation within Bakken shale. Resistivity values for Upper and Lower Member shales were mapped in southeastern Saskatchewan (Figures 3 and 4) using only deep-reading laterologs and without applying borehole or environmental corrections. Areas having resistivity values in excess of 35 ohm-m in the Upper Member shale oversteps that of the Lower Member shale.*
>
> *It is noteworthy that the area of highest resistivities for Upper and Lower Bakken shales is located immediately north and west of the Nesson Anticline, a feature associated with the region of enhanced hydrocarbon generation in the United States and spatially located within the Trans Hudson Orogen (Kreis and Kent, 2000). This region has been documented to have anomalously high heat flow, probably related to basement tectonics (Majorowicz et al., 1986; Majorowicz et al., 1988), and enhanced hydrocarbon generation (Osadetz and Snowdon, 1995). A northeastsouthwest–striking trend of exceptionally high resistivities (e.g., 8-13-1-10W2 reads over 25 000 ohm-m in the Upper Member shale) is recognized on the Upper Member shale resistivity map, and is parallel to, and possibly a northeasterly extension of, the Brockton-Froid-Fromberg Fault Zone (Figure 4). Also, the salt-free area known as the Hummingbird Trough, where tectonic stress concentrations might be expected, is coincident with a region of anomalous resistivity values in both Upper and Lower Bakken shales. Recognition of these structural and resistivity trends has implications for hydrocarbon exploration in this area.*
>
> *Reservoir quality in Middle Bakken sandstones and siltstones is generally fair to poor. Porosity usually ranges from 5 to 15%, but can reach over 20% in some locales such as in the Rocanville Pool in Tp 15 and 16, Rge 31W1. Permeabilities commonly range from 1 to 20 md. The relatively low permeability of these rocks suggests they might best be developed using horizontal completion programs.*

Historically, exploration companies have targeted "clean" (i.e., generally low argillaceous content) sandstones with relatively high geophysical log resistivities as their primary reservoir in southern areas near to the U.S. border. However, perforated intervals of high resistivity are commonly calcite-cemented sandstone with moderate to poor reservoir characteristics. Careful examination of numerous cores in this study has shown that, where present, the "dirtier" (i.e., more silty and argillaceous) sandstone immediately overlying the calcite-cemented lower portion of unit B often shows a faint oil stain that produces a strong milk-white cut but gives a very low resistivity on geophysical logs (i.e., 1.5 to 3 ohm-m). When completing the calcite-cemented portion of the Middle Bakken, companies have regularly fractured and sometimes acidized the interval in an effort to enhance production, but they have often ignored the immediately overlying non-calcite-cemented "dirty" sandstone (Kreis et al., 2005). Resistivity values over this upper interval are only a few ohm-m but a faint oil stain and strong milk-white cuts were observed.

Worthington (2000) discusses factors controlling low-resistivity pay zones citing numerous examples from around the world. He indicates that the low-resistivity pay problem is focused upon the inability to accurately evaluate water saturations from a resistivity log in certain circumstances. He suggests that this problem is most common in reservoirs displaying one or more of the following characteristics: laminated sandstones and shales, fresh waters, conductive minerals, fine-grained sandstones, and microporosity. Careful examination of core in this study suggests that Middle Member reservoirs often show many of these characteristics. The Middle Member sandstone is commonly silty, argillaceous, very fine grained, interlaminated, and abundantly pyritiferous. For these reasons, it appears that considerable potential exists for by-passed pay in the Bakken Formation, and that care must be taken in evaluating the prospectivity of a Middle Member reservoir from geophysical logs. It should be noted that, over the Middle Member producing intervals, low-resistivity readings (i.e., <5 ohm-m) are often observed from rocks such as those described above. For example, a core from an oil-producing Middle Member sandstone in the 7-6-8-8W2 well of the Viewfield Pool shows a very silty, argillaceous, weakly interlaminated to massive, very fine-grained quartz sandstone with abundant pyrite over the perforated interval. Over most of this interval, a faint light brown oil stain is present, yet resistivity values range from only 3.4 to 4.7 ohm-m.

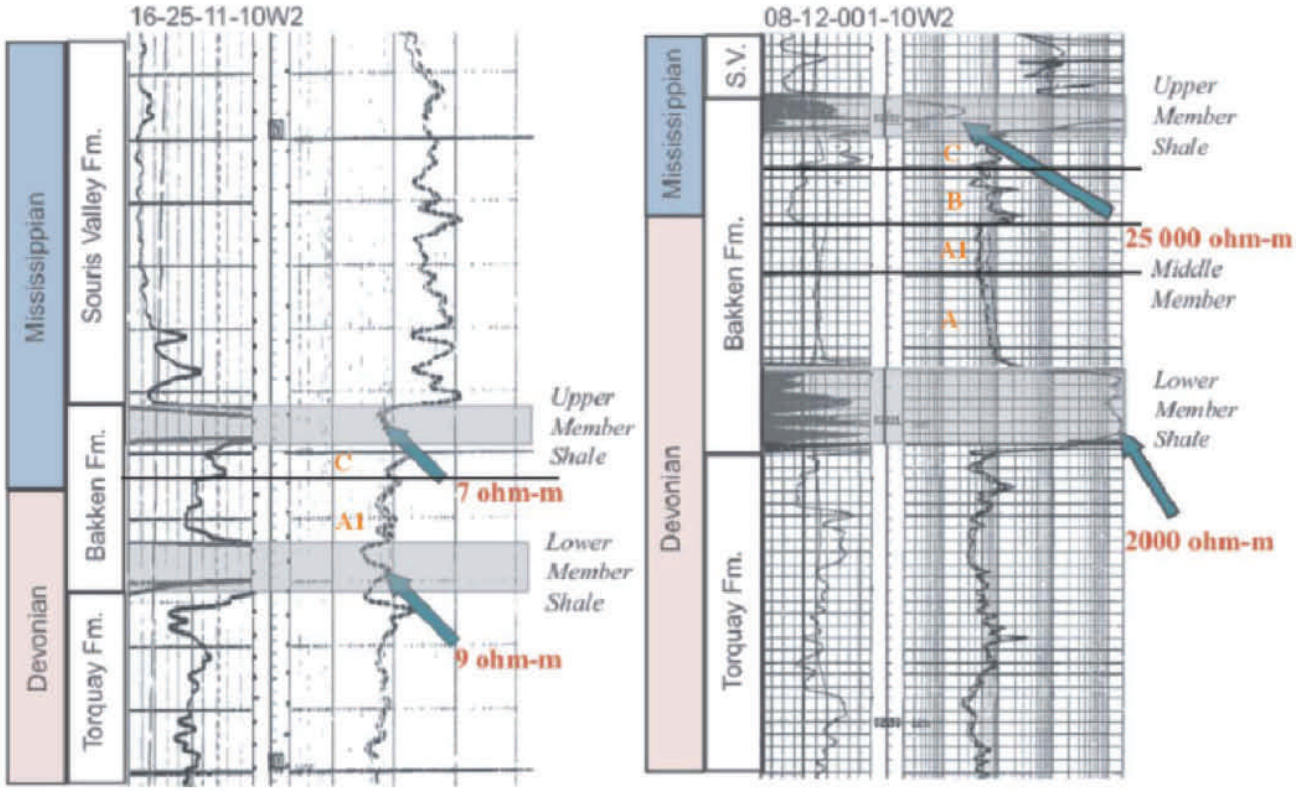


Figure 4 - Resistivity logs showing normal (left) and anomalous (right) readings in the Upper and Lower Member shales of the Bakken Formation. Units A1, B, and C are defined in the text.

Entire Paper: http://www.mogulenergy.com/pdf/EGYPT_hydrocarbon.pdf

Kreis, L.K. and Costa, A. (2005): Hydrocarbon potential of the Bakken and Torquay formations, southeastern Saskatchewan; in Summary of Investigations 2005, Volume 1, Saskatchewan Geological Survey, Sask. Industry

E.R. Crain states the following about the Bakken:

The Bakken formation in the Williston Basin of Saskatchewan, Manitoba, and North Dakota is a classic silt and sandy silt. It is low resistivity due to high salinity formation water with high irreducible water saturation (caused by very fine grain size), and the lithology is a mix of quartz and dolomite (and sometimes calcite). In Alberta and Montana, the Bakken equivalent, the Exshaw, and adjacent formations (Banff / Lodgepole and Big Valley /Three Forks) are "Tight Oil" prospects, as are the Duvernay, Second White Specks, Nordegg, and other formerly unattractive low porosity reservoirs.

In Saskatchewan, the naturally low resistivity in Bakken pay zones is further aggravated by thin clay laminations, clay filled burrows, laminated porosity, and dispersed pyrite. Even more confusing is the water resistivity variation on the northwest and northeast edges of the Basin. Here, wet wells have higher resistivity than oil wells further south because the water resistivity is 5 to 20 times higher than deeper in the Basin. This results from fresher water recharge from the Black Hills of North Dakota. An adequate production testing program is the only solution to this issue, as there is no log analysis model that will predict water resistivity in this reservoir.

Water salinity in the deeper North Dakota wells reaches 325,000 ppm, making for exceedingly low water resistivity. In Saskatchewan, salinity is usually at 200,000 ppm or more, but can be as low as 25,000 in the recharge area. Pore geometry in the deeper parts is more intergranular in texture and irreducible water saturation is lower than in Saskatchewan. Typical SW in Saskatchewan averages 50% grading southward to about 30% in the deeper North Dakota wells. Very low apparent SW in Saskatchewan usually means fresh water recharge, possibly with some residual oil. The "best-looking" wells are actually water producers, but have measured resistivity values 2 to 4 times higher than productive oil wells. Water resistivity values are sparse, so any water recovery should be sent to the lab and analyzed.

The low resistivity, high radioactivity, large density neutron separation caused by dolomite and pyrite, and the high PE value (near 3) conspire to make the zone look like shale on logs. Worse, some literature continues to name the producing zone the Bakken Shale, even though we know the Middle Bakken is a radioactive dolomitic sand or siltstone. These conflicts in the conventional data suggest strongly that some special core analysis should be done, namely electrical properties, capillary pressure, X-Ray diffraction and thin section mineralogy, and anything else that can help explain the petrophysical response to these complex rocks.

The Bakken is now the biggest oil play in North America, and may ultimately be the largest ever found, even larger than Alaska North Slope. It is sometimes termed an "unconventional" reservoir, due to the low permeability of the siltstone intervals. In North Dakota, it is also called a "resource" play because the oil was formed in place (from the Upper and Lower Bakken Shales), although in Saskatchewan the oil migrated from the deeper parts of the basin, and is not strictly speaking a resource play there. Alberta and Montana is also probably a resource play, but few facts have been published so it is hard to tell.

Vertical wells are not overly prolific due to the low intrinsic permeability of the silty sand, but most horizontal wells do OK. In the deep, hot, over-pressured region in North Dakota, some wells are flowing 1000 to 2000 barrels per day.

Pyrite is a conductive metallic mineral that may occur in many different sedimentary rocks. It can reduce measured resistivity, thus

increasing apparent water saturation. The conductive metallic current path is in parallel with the ionic water conductive path. As a result, a correction to the measured resistivity can be made by solving the parallel resistivity circuit.
Although the math is simple, the parameters needed are not well known. The two critical elements are the volume of pyrite and the effective resistivity of pyrite. Pyrite volume can be found from a two or three mineral model, calibrated by thin section point counts or X-ray diffraction data.

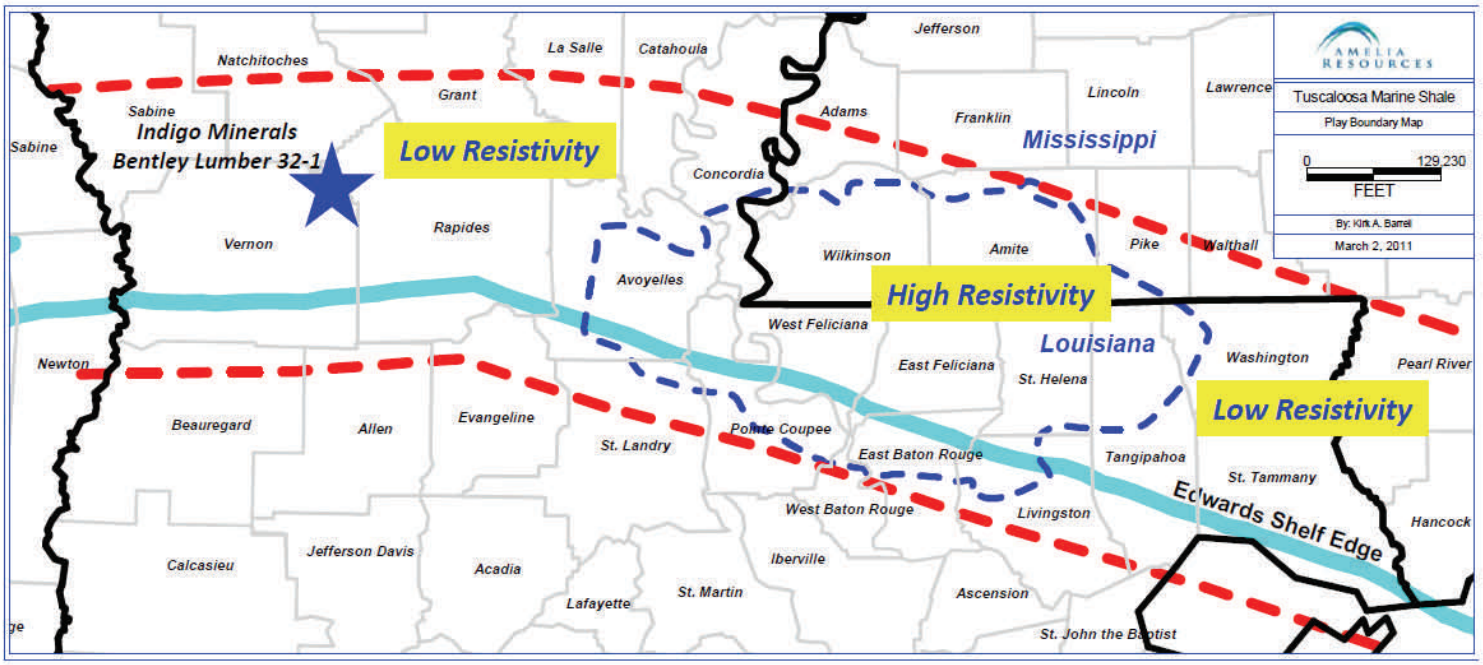
The resistivity of pyrite varies with the frequency of the logging tool measurement system. Laterologs measure resistivity at less than 100 Hz, induction logs at 20 KHz, and LWD tools at 2 MHz. Higher frequency tools record lower resistivity than low frequency tools for the same concentration of pyrite. The variation in resistivity is caused by the fact that pyrite is a semiconductor, not a metallic conductor. It is nature's original transistor, and formed the main sensing component in early radios.

Typical resistivity of pyrite is in the range of 0.1 to 1.0 ohm-m; 0.5 ohm-m seems to work reasonably well. The effect of pyrite is most noticeable when RW is moderately high and less noticeable when RW is very low. The corrected resistivity can be plotted versus depth, along with the original log. Corrected water saturation will always be lower or equal to the original Sw. If CONDcorr goes negative, lower Vpyr or raise RE.

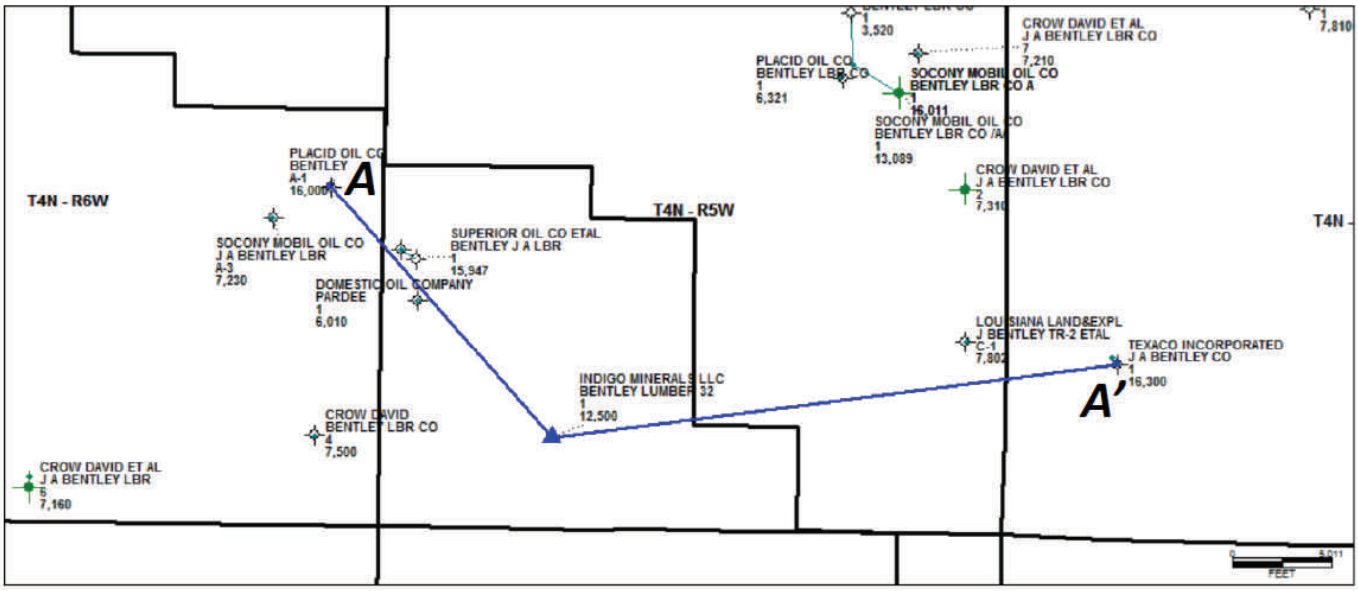
Source: Crain's Petrophysical Handbook; http://www.spec2000.net/18-tightoil.htm

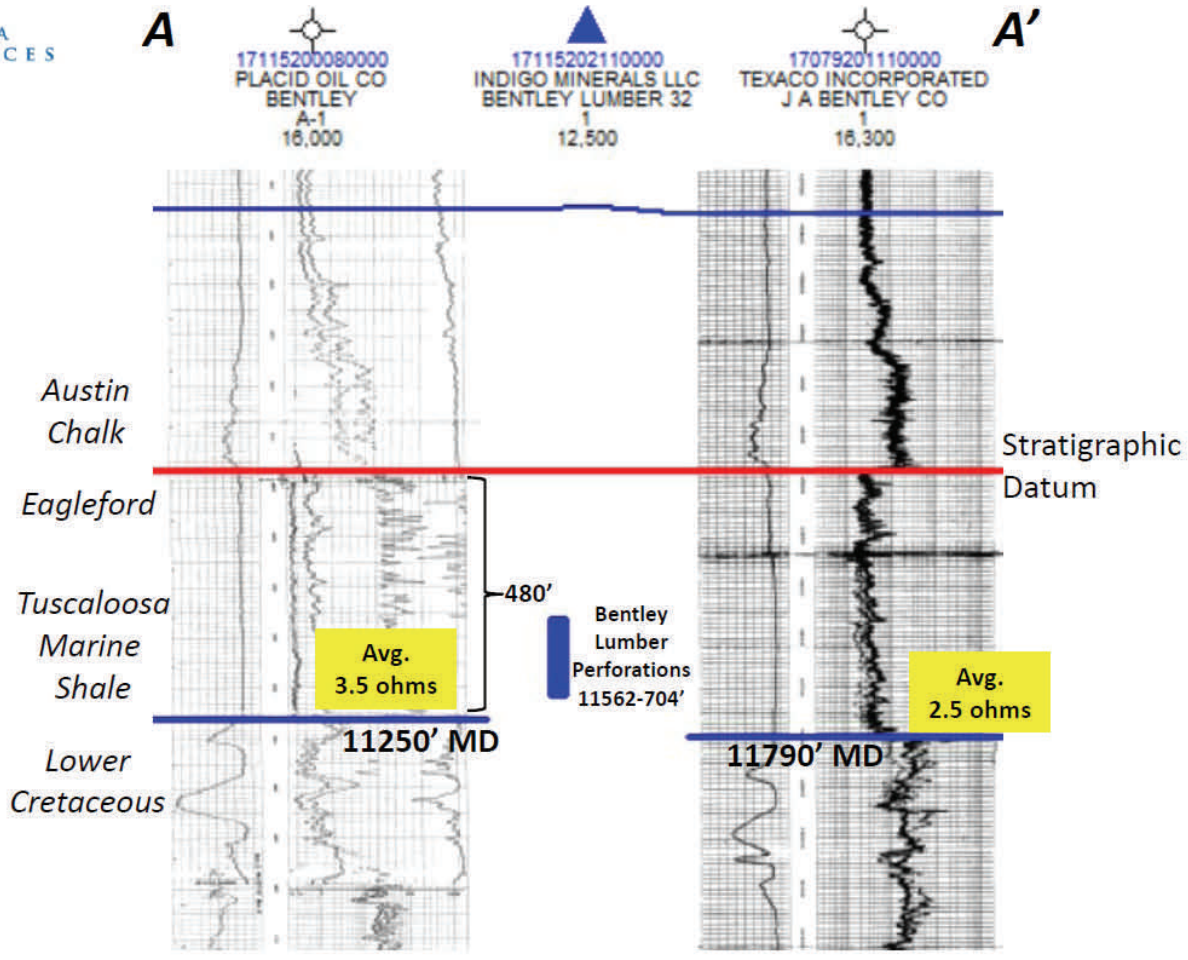
AMELIA RESOURCES

The Indigo Minerals LLC Bentley Lumber 32-1 is the most recent Tuscaloosa Marine Shale test. The well was spud on 11-27-10 and was recently completed and hydraulically fractured in the vertical wellbore. As of 3-15-11, results are unknown. The well is located in the northeastern corner of Vernon Parish in the area of the play exhibiting lower resistivities averaging 2.5-3.5 ohm-m. This well has the potential to prove that lower resistivities are productive and economically attractive. If so, the geographic area of interest in this play will expand significantly.



Cross Section Map





Disclaimer

Amelia Resources LLC expressly disclaims any and all liability for any loss or injury caused, in whole or in part, by its actions, omissions, or negligence in procuring, compiling or providing the information contained in this site, including without limitation, liability with respect to any use of this site, or the information contained herein. Reliance on the information contained on this site, is solely at your own risk. While any information and material contained in the Content are reasonably believed by Amelia Resources LLC to be accurate and complete in all material respects at the time of posting, and although Amelia Resources LLC makes reasonable efforts to ensure that all such information and material remain current, accurate and complete, Amelia Resources LLC accepts no liability, responsibility or obligation whatsoever to post, update, amend, review or remove such information, material or the Content or any portion thereof except as may be required by applicable law. You acknowledge that such facts, information and material may change quickly and without notice and that such changes will take time to be posted on the Website, if they are posted at all. Amelia Resources LLC may, at its sole discretion, post, delete and amend Content without notice. The information may change or be altered at any time. You should not rely on any opinion or other information set out in this document. Users are required to conduct their own investigations, analysis, due diligence, draw their own conclusions, and make their own decisions. You acknowledge and agree that Amelia Resources LLC and/or its officers, agents, shareholders, servants, or employees do not assume and hereby disclaim any liability to any party for any loss or damage caused by the use of the information contained herein (or errors or omissions in the information contained herein).

www.ameliaresources.com www.tuscaloosatrend.blogspot.com

Contributed by:
MGS Editor

AEG National President to speak on LiDAR use in fault mapping

Mr. Bruce Hilton, the President of the Association of Environmental and Engineering Geologists will address the Lower Mississippi Valley Section of AEG at the section meeting in Jackson, Mississippi on the evening of Friday, August 26, 2011. Mr. Hilton works for Kleinfelder in Sacramento California and is Kleinfelder's Chief Engineering Geologist. Mr. Hilton will give a technical presentation on the Martis Creek Dam in the Tahoe Basin of California. In 2006, this dam was identified by preliminary risk analyses to be one of the Corps of Engineers' top ten high risk dams in the entire US based on seepage and seismic deficiencies. During the ensuing seepage and seismic studies, LiDAR data was obtained largely as a base for topographic analysis of hydrologic breach and inundation mapping studies. A review of these very high resolution, bare earth LiDAR by the Corps' suggested the presence of a strong, continuous lineation through the spillway near the dam and extending for miles in either direction. Mr. Hilton's talk focuses on the use of these LiDAR data and the geomorphic analysis and paleoseismic trenching to further evaluate this newly named Polaris Fault Zone.

For meeting location and details contact Ken Ruckstuhl at EMS at (601) 992-8233 or kruckstuhl@env-mgt.com.

Contributed by:
Ken Ruckstuhl

News from ASTM – Reflectance measurement for dispersed vitrinite

A new American Society for Testing and Materials (ASTM) standard test method for measurement of the reflectance of vitrinite dispersed in sedimentary rocks has been developed by an international committee of technical experts from government agencies, academia, industry, and consultancies. This product grew from the efforts of the International Committee for Coal and Organic Petrology (ICCP) Identification of Primary Vitrinite Working Group, and is the result of an international partnership between members of ICCP, ASTM, The American Association of Petroleum Geologists, and TSOP. The new consensus standard is available for purchase from http://www.astm.org/Standards/D7708.htm and is included in the 2011 Annual Book of ASTM Standards, v. 05.06, Gaseous Fuels; Coal and Coke, which can be obtained as a free yearly benefit to ASTM members.

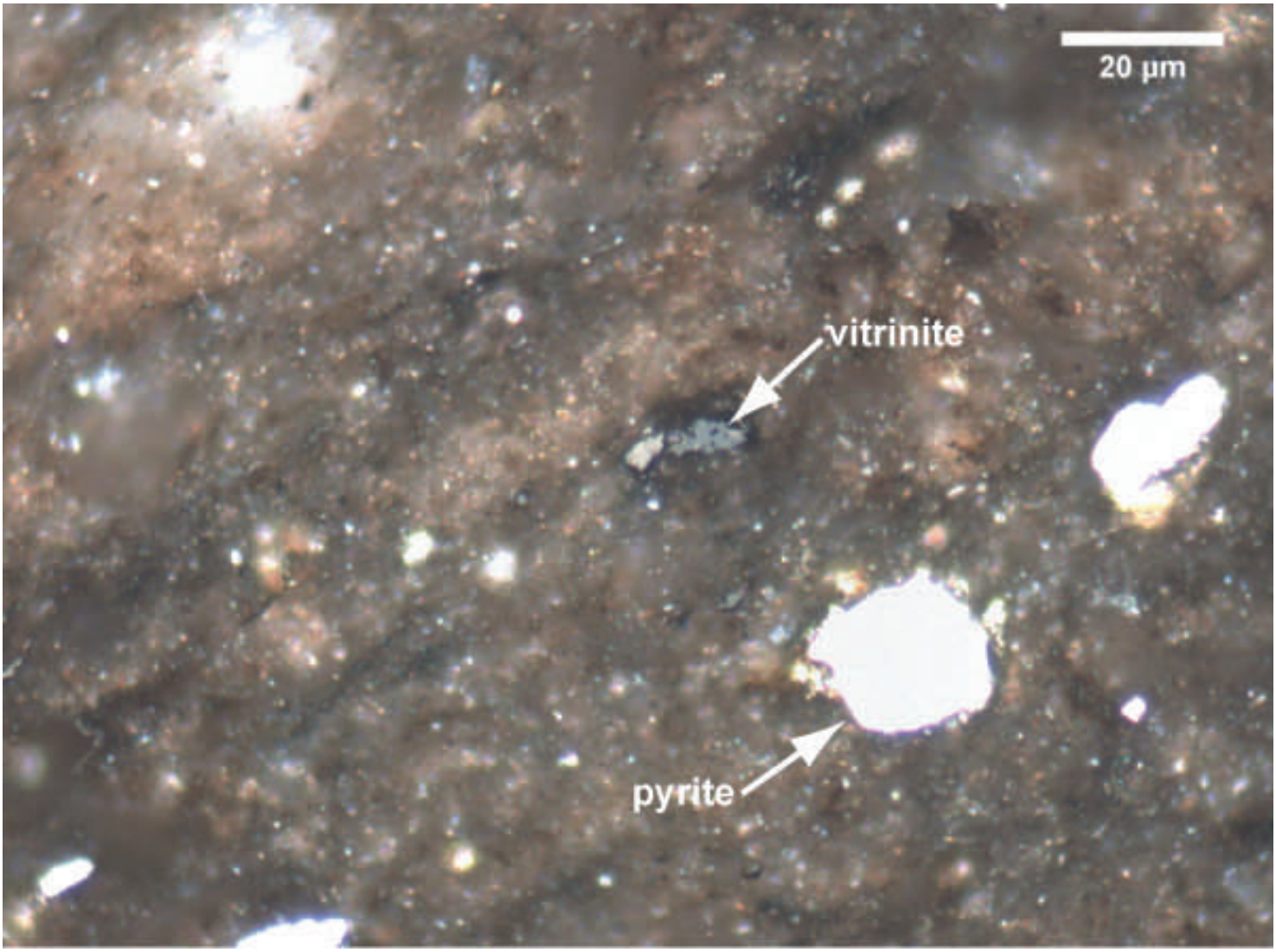
Development of the new test method (ASTM D7708-11) began in 2008 with a survey of common practices used in laboratories that routinely measure the reflectance of dispersed vitrinite in shales. The test method writing committee was identified from among the survey respondents, and the existing ASTM coal vitrinite reflectance standard (ASTM D2798) was used as an outline for the new test method. Significant changes from the coal standard include: 1) specialized terminology to include recycled vitrinite, zooclasts, solid bitumens, and marine algae; 2) discussion of potential for vitrinite suppression and retardation in certain conditions; 3) inclusion of fluorescence observation and resulting changes to equipment description and procedure; and 4) addition of reporting requirements, including type and quality of sample preparation, observation of fluorescence, and consideration of supporting data and information.

The new standard was successfully balloted through the subcommittee and D05 main committee levels of the ASTM vetting process with no negative votes received. However, users of the standard and other interested parties can bring comments and concerns to the attention of ASTM subcommittee D05.28, Petrography of Coal and Coke, which is responsible for the maintenance and revision of this and other ASTM petrography standards. Interested MGS members who would like to contribute to consensus standards development within subcommittee D05.28 are encouraged to contact Paul Hackley, U.S. Geological Survey (phackley@usgs.gov), for additional information.

Anticipated users of the new D7708-11 standard include government, academic, and service laboratories. The standard will be used as the prescribed method for the dispersed vitrinite reflectance accreditation program of the ICCP, which currently includes approximately forty laboratories worldwide. The test method is predicted to be most relevant for shale gas plays where precise information concerning thermal maturity is considered key to successful basin analysis. Anticipated future improvements to the standard include the creation of quantified reproducibility and repeatability values through inter-laboratory round-robin exercises, and the development of a supplemental online image atlas of dispersed organic matter in sedimentary rocks to aid in the identification of indigenous vitrinite.

Contributed by:
Paul Hackley
U.S. Geological Survey
MS 956 National Center
Reston, VA 20192

Example of dispersed vitrinite in the Upper Cretaceous Eagle Ford Shale, Maverick Basin, south Texas.



Contributed by:
Paul Hackley
U.S. Geological Survey
MS 956 National Center
Reston, VA 20192

Gulf Coast Association of Geological Societies

GCAGS 2011 Annual Convention

Veracruz, Mexico

Sharing knowledge to add value

Hosted by the Asociación Mexicana de Geólogos Petroleros

61st GCAGS Annual Convention

October 16 - 19, 2011

Veracruz, Mexico

GULF COAST ASSOCIATION OF GEOLOGICAL SOCIETIES

GOM GEOLOGY GOES BEYOND BORDERS!

An ancient Aztec icon, ***OLLIN***, inspired the 61st GCAGS Annual Convention. Ollin represents transformation and creative evolution and also symbolizes the idea AMGP's geologists have about this Convention expressed by its theme: ***"Sharing knowledge to add value"***. The convention features a first-class technical program in the relaxed ambiance of the port city of Veracruz.

For the very first time you will have a chance to attend a meeting offering an integrated technical program with an unabridged regional vision of the geology of the Gulf of Mexico.

- 155 technical presentations featuring Deepwater Setting, Geology, and Economics: 95 from southern and western GOM, 53 from northern GOM, and 7 from Cuba.
- Symposium: "Jurassic Regional Framework and Reservoirs in the Gulf of Mexico".
- A luncheon conference.
- 6 short courses including *Fractured reservoirs with examples from southern Mexico* and *Petroleum provinces of Mexico.*
- 3 field trips to classic localities of eastern and southeastern Mexico: *Chicontepec, Sierra Madre Oriental,* and *Sierra de Chiapas.*
- Exhibition including networking events.

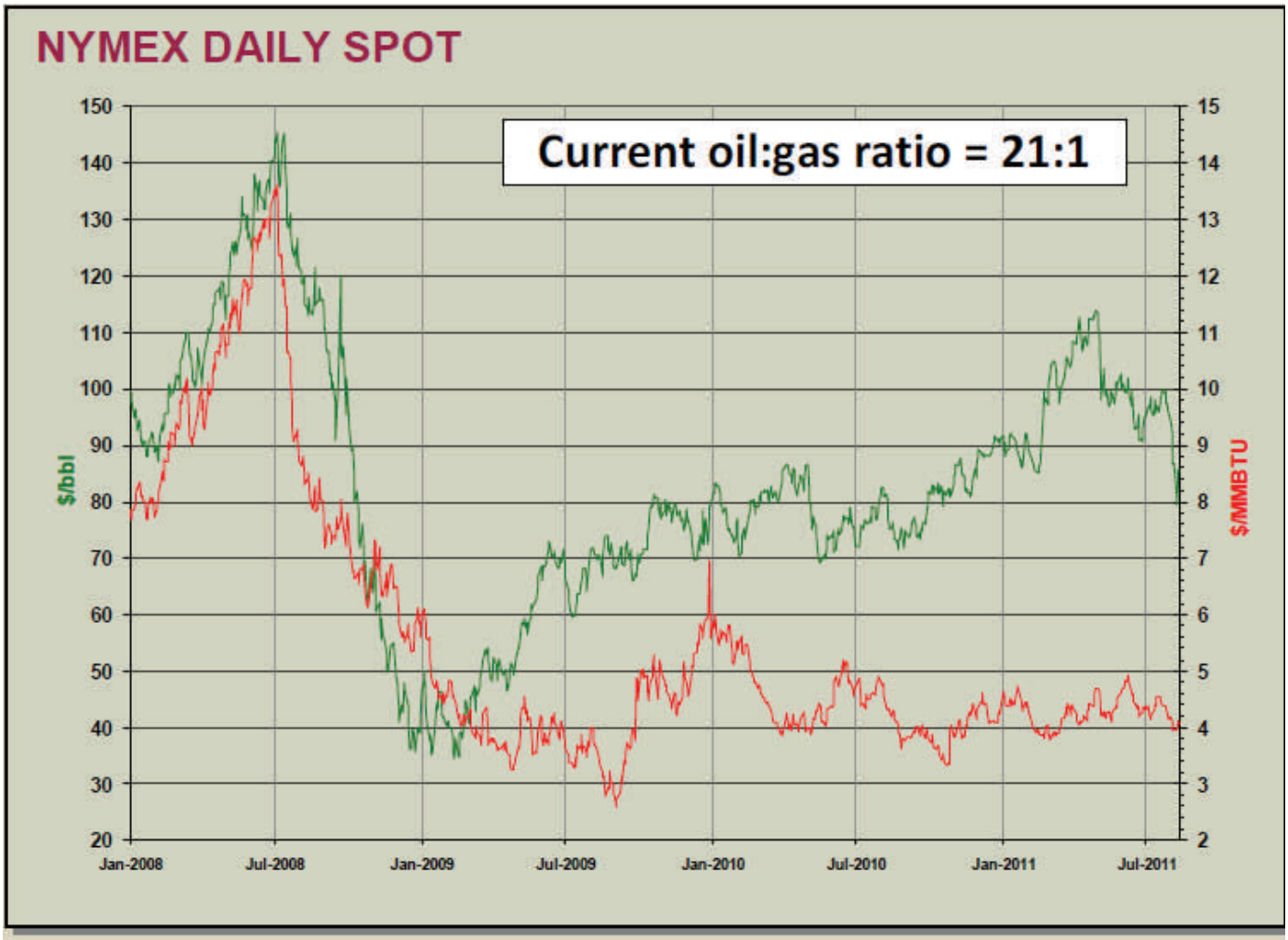
Student activities and spouse/guest programs are an integral part of the Convention.

DON'T MISS THIS LANDMARK CONVENTION!

For more information visit:

www.gcags2011.com

We look forward to seeing you all in Veracruz!



Current Oil & Gas Prices NYMEX Close Friday 8/12/11	OIL $ 85.38	GAS $ 4.06	OIL-12-Mo Strip $ 85.89	GAS-12-Mo Strip $ 4.20
ICE* current(8/15 @ 9:05 AM)	$ 86.86	$ 3.97	*Intercontinental Commodities Exchange*	

SOURCE: Oil & Gas Asset Clearinghouse

TURN IT TO THE RIGHT!

Do you have any articles that you want to share with the MGS membership?

Something you read online or something you wrote.

Please email them to the MGS Editor at mgs@treetop.us.com.

We would like to add more content from the membership.

MGS BOLAND SCHOLARSHIP FUND

The Society's L. F. Boland Scholarship Fund is open to donations (tax deductible) year round. Your contribution will help the Society recognize and reward outstanding earth science students at its annual Honors Day meeting on April 7th, 2011.

Since inception in 1980, the Society has honored 104 students with the Boland Award. If you would like to contribute, please contact Dave Cate at 601-718-9397 or mail your check (L. F. Boland Scholarship Fund) to him at 217 W. Capitol St., Jackson, MS 39201.

The MGS gratefully acknowledges the following contributors to the L. F. Boland Scholarship Fund for the 2010-2011 year.

Randy Bissell
Dawn Bissell
George Puckett
Lawrence F. Boland
Ken McCarley
Maurice Birdwell
Jim Furrh
Maurice Meylan
Julius Ridgway
Jim Michael
Stewart Welch
Dave Cate
Joe McDuff
Chris Franks
James Libiez
Donnie Lambert
Tony Stuart
Linda Harper
Jerry Ogden
William & Liz Boland Patterson
Hillary & Mary Boland Zimmerman

MGS Honorary Members

Esther Applin*	**Paul Applin***	**Lawrence F. Boland***
Verne Culbertson *	**H. Leroy Francis***	**Jim Furrh**
David C. Harrell*	**Oleta R. Harrell***	**Ralph Hines**
Dudley J. Hughes	**Urban B. Hughes***	**Wendell B. Johnson ***
Walter P. Jones*	**Harold Karges***	**Wilbur H. Knight***
Winnie McGlammery*	**Thomas McGlothin***	**Frederic F. Mellen***
Maurice E. Miesse*	**Emil Monsour***	**William H. Moore***
Marvin E. Norman*	**Marvin L. Oxley***	**Richard R. Priddy***
Thurston Connell Rader*	**Baxter Smith***	**Harry V. Spooner**
Henry Toler*	**H. Vaughn Watkins**	**Stewart W. Welch**
Charles H. Williams	**Jerry Zoble**	**Julius Ridgeway**

*** deceased**

MEMBERSHIP APPLICATION / RENEWAL FORM

MISSISSIPPI GEOLOGICAL SOCIETY

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

2011-2012

Membership year is June through May

New Membership ($20/yr)____ Renewal ($20/yr)____ Student (FREE)____ Associate ($20/yr)____

Boland Scholarship Fund Donation $_____ Total Amount Enclosed $_____

Last Name:_____ First:_____ MI:_____

Mailing Address:_____

Office Phone:_____ Home Phone:_____ FAX:_____

E-mail Address: _____

College/University Attended: _____

Degree(s) Obtained and Year(s) Awarded: _____

Professional Associations, Certifications, & Licenses: _____

The following are MGS members in good standing

Ken Adams
Bill Bagnall (O)
Neil Barnes (O)
Maurice Birdwell
Randy Bissell
Matt Caton (O)
Dave Easom
Jim Files (O)
Max Gilpin
Andrew Head
I Meade Hufford
Lisa Ivshin
Dustin Johnson
Lars Johnson
Joe Johnson (O)
Stanley King (O)
Maurice Meylan
Charlie Morrison
Mike Rasmussen
Philip Reeves
Gail Russell
Winston Russell
Drew Sills
James Starnes
John Sullivan
Andy Sylte
Tom Sylte
David Thompson
Steve Walkinshaw (O)
Joe White

(O) - officer (H) - Honorary

MGS ADVERTISING ORDER FORM

September 2010 – May 2011

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

Petroleum Geologist

Tellus Operating Group, an oil and gas operating company, is seeking a Petroleum Geologist for its facility in Ridgeland, MS to apply concepts of petroleum geology, geophysics and petrophysics to analyze conventional and unconventional oil and gas reservoirs; utilize knowledge of Mississippi Interior Salt Basin stratigraphy, geophysical log characteristics and area field and well histories to locate, develop and manage oil and gas assets; use PETRA software and geological, geophysical and petrophysical tools to import and manage well data, create geological maps, analyze and correlate geophysical well logs, and perform subsurface mapping (structure, porosity, isopach, net pay) at the large field level; use SMT software to perform basic seismic interpretation; apply techniques of Tertiary Enhanced Oil Recovery (EOR) to optimize drilling and development of oil and gas; integrate production and engineering data for Tertiary EOR flood analysis; perform sequence stratigraphic analyses and build structural and stratigraphic cross sections to develop geological models and recommend new drills and workovers; perform mapping of mature oil fields, determine and decipher both old (paper) data and new data, and make technically sound estimates of each field. Must have experience in well site operations including: formation and rock identification, geophysical well logging and coring practices. This position requires a Bachelor's degree in Geology and 5 years of active production geology experience, including experience in the Mississippi Interior Salt Basin. Please send resumes to: Tellus Operating Group, Attention: Mr. George W. Rhodes, 602 Crescent Place, Suite 100, Ridgeland, MS 39157 or by email to jobinfo@treetop.us.com. Include Job Code TOGGEO01. Tellus Operating Group is an equal opportunity employer.

ENERGY DRILLING COMPANY ®

CONTRACT DRILLING 3000 – 15,000 FEET

MS-AL-FL-ARK-LA-TEX

Pat Burns, Jr.		P. O. Box 905
Jody Helbling	601-446-5259	413 Liberty Rd.
Nestor Navarro	(Fax)601-446-8607	Natchez, MS 39121

Tellus

OPERATING GROUP, LLC

OPERATING GROUP, LLC

602 Crescent Place, Suite 100

Ridgeland, MS 39157

601-898-7444 Voice

601-898-7446 Fax

BRIAN SIMS

EXPLOITATION GEOLOGIC MANAGER

Email: bsims@tellusoperating.com

OWLCO

Oil Well Logging Company
P. O. Box 1692
Madison, MS 39130
(601) 477-8315

MOCO INC.
The Mississippi Oil Company

MICHAEL L. BLACKWELL
H. DON NOBLITT

603 Northpark Drive • Ridgeland, MS 39157
(601) 957-3550

VALIOSO
PETROLEUM CO., INC.

Karl J. Kaufmann
President

Suite B
546 Keyway Drive
Jackson, MS 39232

601-936-3601
Fax 601-936-3646
coukauf@aol.com

BLAIR & BONDURANT, P.A.
ATTORNEYS AT LAW

WILLIAM F. BLAIR

P.O. Box 321423
Jackson, MS 39232
Telephone: (601) 992-4477
Telecopier: (601) 992-9189

1368 Old Fannin Road
Suite 300
Brandon, MS 39047
Email:

TROPHY
PETROLEUM
CORPORATION

100 N. Van Buren Street
Post Office Box 415
Carthage, MS 39051
(601) 298-0200 (601) 298-0201 Fax

E. Wayne Upchurch
President

ARK-LA-TEX
LOG LIBRARY, INC.

400 TRAVIS - SUITE 500
SHREVEPORT, LOUISIANA 71101-3113

Marie Pace
MANAGER

PHONE (318) 227-1641
FAX (318) 227-1642

BRUXOIL, INC.

DAVID K. BROOKS - PRESIDENT
RAYMOND A. HELFRICH - VICE PRESIDENT
DOROTHY M. JAUBERT

P. O. Box 16929
Jackson, MS 39236
(601) 981-5722
FAX: (601) 366-9490

COX **John G. Cox**
Petroleum Geologist

John G. Cox
Geologist

603 Northpark Drive, Suite 300
Ridgeland, Mississippi 39157

601.978.1763
fax 601.952.0425
john_cox@bellsouth.net

MOON & HINES
OIL & GAS EXPLORATION

MOON-HINES-TIGRETT OPERATING CO., INC.
PROPERTY MANAGEMENT

P O BOX 3216
RIDGELAND, MS 39158

OFFICE (601) 572-8300 **FAX (601) 572-8310**

ROUNDTREE & ASSOCIATES, INC.
OIL AND GAS PRODUCTION
210 Trace Colony Park Drive,
Ridgeland, MS 39157
Phone (601) 355-4530

Boone Exploration, Inc.

Lynn D. Boone
President

J.C. Carlisle
Vice President

21 Wire Road
P.O. Box 8660
Huntsville, TX 77340

Phone: 936-295-4066
Fax: 936-295-4042
Email: jcc9551@aol.com

KELTON OPERATING COMPANY, INC.
since 1953

605 SUN TRUST TOWER
220 W. GARDEN STREET
PENSACOLA, FL 32501
P.O. BOX 230
PENSACOLA, FL 32591

TELEPHONE
(850) 434-6830
FACSIMILE
(850) 434-6842

I. Meade Hufford, CPL
Owner-President

Energy Land Services
Oil & Gas Exploration

99 N. Post Oak Lane
Suite 6101
Houston, TX 77024
Phone: 713-888-0012
Cell: 713-705-7235
E-mail: hufford1913@aol.com
VA Phone: 804-438-5852

JULIUS M. RIDGWAY

COASTAL EXPLORATION, INC.

1437 OLD SQUARE ROAD, #104
JACKSON, MISSISSIPPI 39211

601-362-0502
FAX: 601-362-5397

SPOONER PETROLEUM COMPANY
210 East Capitol St., Suite 956
Jackson, Mississippi 39201

Oil & Gas Production & Exploration
Contract Operations

601-969-1831

JAMES B. FURRH, Jr., Inc.

Oil & Gas Exploration

4450 Old Canton Road, Suite 205,
Jackson, MS 39211
Phone (601) 982-9393 Fax (601) 982-9785

E. GEOFFREY JEFFREYS
Petroleum Consultant

OIL, GAS AND MINERAL APPRAISALS

115 Fairway Drive
Daphne, AL 36526
egjeffreys@aol.com

Off (251) 621-1850
Fx (251) 621-1630
Cell (251) 709-7919

Bryant Miller
1837 Peachtree Street
Jackson, MS 39202
bryantgmiller@bryantgmiller.com

ENERGEN
RESOURCES

President & COO
John Richardson

Senior Vice President
Operations
Paul Sparks

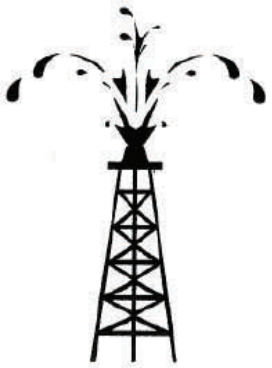
General Manager
Acquisitions & Engineering
Gene Cash

General Manager
Geology
Ron Tisdale

General Manager
Land
Paul Rote

(205)326-2721

Joseph H. McDuff
Geologist



351 Chapel Loop
Mandeville, LA 70471
985.845.9430
jhmcduff@charter.net

DLM Inc.

Diversified Land Management, Inc.

PERMIT ACQUISITION SPECIALISTS

P.O. Box 363
Ridgeland, MS 39158

505 Loire
Suite H
Lafayette, LA 70507

Jack Tate
President
Office: 337.886.0060
Fax: 337.886.0064
Cell: 601.259.1366
email: geoagent46@aol.com
dlminconline.com

"A company committed to excellence and achieving success while providing professional permitting acq. & project mngt. with the client's interests & concerns top priority"

MISSISSIPPI GEOLOGICAL SOCIETY

PAST PRESIDENTS

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