

Volume 54, Number 9



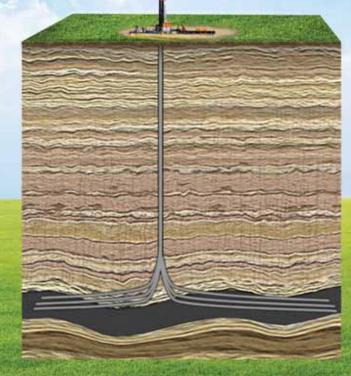
MARCH 10 - NOGS LUNCHEON **Presentation: Rethinking Coastal Restoration Guest Speaker: Chris McLindon** New Orleans, Louisiana

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Published monthly by the New Orleans Geological Society. This issue was sent to press on February 22, 2014.

*Interested in contributing to the NOGS LOG?* Please submit items by the 1st Friday of the month to nogseditor@gmail.com. Advertising requests should contact the NOGS office at info@nogs.org.

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## on the cover:

## Cover Photo Submitted by: Chris McLindon\*

## Mississippi River Sediment Plume — Louisiana

The Mississippi River carries roughly 550 million metric tonnes (500 million tons) of sediment into the Gulf of Mexico each year. This true-color image, acquired from the Moderate Resolution Imaging Spectroradiometer (MODIS) aboard NASA's Terra satellite via direct broadcast on March 5, 2001 at 10:55 AM local time, shows the murky brown water of the Mississippi mixing with the dark blue water of the Gulf two days after a rainstorm. The river brings enough sediment from its 3,250,000 square km (1,250,000 square mi) basin to extend the coast of Louisiana 91 m (300 ft) each year.

To the left of the Mississippi River delta is the Atchafalaya River, a "distributary" of the Mississippi that carries about 30% of the river's total flow.

\*Photo and caption courtesy of NASA's Earth Observatory http://earthobservatory.nasa.gov/IOTD/view.php?id=1257

# From the Editor

Happy Mardi Gras! I hope everyone is going to enjoy the holiday whether they're standing along the parade route or away on vacation.

We have a wonderful two-page spread this month regarding the NOGS Museum Initiative that is led by Tom Bergeon and Ed Picou. I would like to thank Tom for his dedication in presenting geological outreach events to the children of Greater New Orleans. His latest passion is helping the future Children's Museum of St. Tammany with their fundraising, networking, and exhibits. Please consider attending their fundraising event held on March 23 and support this worthy cause.

NOGS is having a Spring Social at the Old Rail Brewery in old Mandeville. Details are on page 15 and this event is open to all NOGS members, spouses, and anyone interested in joining NOGS. We would like to especially extend this invitation to attend to anyone interested in being a part of the newly reorganized New Geoscientists of New Orleans (NGNO). This will be the first event where NGNO will be able to meet in many years. Come on out for beer, wine, food, and friendship.

NOGS will be presenting a one-day course on "Petroleum Geology for Non-Geologists" on Tuesday, April 15. This is an excellent opportunity for students, teachers, friends, and fellow employees to learn about oil and gas exploration. See page 27 for details.

The details for our April luncheon are still being worked on as it will be a joint luncheon between SGS and NOGS. SGS is holding a short course on Thursday, April 10 that will be taught by Dr. Kurt Marfurt of the University of Oklahoma. He will be teaching about seismic interpretation, specifically focused on the use of seismic attributes for play-based exploration and development. The joint SGS-NOGS luncheon will be on April 10 at the Le Pavillon and will most likely be a condensed version of Dr. Marfurt's one-day class. Look for details about the course and the luncheon in the April *NOGS LOG* and on the website at www.nogs.org.

## Sheri Richardson - NOGS LOG Editor

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# From the President

## UPCOMING EVENTS

March 10 is the date for our next monthly meeting (we will not meet on the first Monday of the month since it is Lundi Gras) and guest speaker Chris McClindon

will present "Rethinking Coastal Restoration." It promises to be a most relevant talk as coastal restoration will have a direct impact on our lives in New Orleans and southern Louisiana.

March 29 is Supersaurus Saturday at the Louisiana Children's Museum. Bring your children or volunteer to help children learn about dinosaurs and geology. Contact Tom Bergeon at tom.bergeon@centuryx.com to volunteer.

The Southeastern Geophysical Society plans to hold a one-day short course taught by Kurt Marfurt on April 10. The details have not yet been finalized, so watch the NOGS website for course details, cost, and how to register.

Finally, get your foursomes ready for the NOGS Bill Craig Memorial Golf Tournament. The date is Monday, April 28 and it will be held at the Money Hill Country Club outside of Abita Springs. Look for details on page 21 in this issue of the *NOGS LOG*.

Even though my paycheck comes from petroleum exploration, I have little or no sympathy for oil companies' current employment plight as they brought it on themselves. Why do I say that?

I knew nothing of the oil industry when I graduated from the University of Hawaii in 1982. I needed a job and the industry was hiring, while the Reagan administration was cutting back on grants. I joined Mobil in Dallas and started work in their one-year geophysicist training program. Everything was new to me. I asked questions and I soaked up as much information as I could. I talked with other people in the training program and we shared life stories. I found out that a lot of the people in the training program had a relative in the industry or oil was part of the community where they lived. The oil industry was in fact one big family.

At that time oil was near \$35 a barrel and expected to go to \$40. There was money to be made and the oil the industry was on a hiring binge, but a few years later the price of oil collapsed to \$15 per barrel as OPEC flooded the market with cheap-to-produce oil. Projects that broke even at \$20 no longer made economic sense. At the same time big investors, arbitragers, and greenmailers bought large chunks of oil companies that they said were bloated, inefficient, and not returning shareholder value.

So, oil companies reduced expenses, cut back on exploration, closed offices, reorganized into business units, and laid off thousands. Everything from then on had to pay its way. If it didn't make money and lots of it, it was gone. When that wasn't enough, oil companies merged and got rid of redundant operations and people, anything that did not fit the core business. Next, the service companies merged to survive, as their once many clients became fewer and even more employees were laid off. People went from being assets to liabilities.

(continued on page 10)

Now I would like to discuss a topic that has been in the news lately: the current oil industry employment situation. Many articles and blogs about work in the oil industry have been written with titles like: "The Coming Employment Crisis," "The Great Crew Change," and "Where are the New Oil Workers?" These articles discuss how baby boomers are leaving the workforce, how there are not enough people to take their place, and how the industry cannot find workers of a certain age to fill the management and senior technical roles.

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# UPCOMING Events & Activities

## March 10 • NOGS Luncheon

## Holiday Inn Downtown Superdome

\$3.00 validated parking in hotel garage

## Presentation: **Rethinking Coastal Restoration**

Guest Speaker:

## Chris McLindon

New Orleans, Louisiana See page 9 for Abstract and Biography

#### HOLIDAY INN DOWNTOWN SUPERDOME

Check with concierge or front desk for location. Lunch served at 11:30 am

March 5-7

World Heavy Oil Congress Hyatt Regency • New Orleans, LA For more information, www.worldheavyoilcongress.com/2014/

> March 28 **NOGS Spring Social** Uld Rail Brewery • Mandeville, LA For more information, www.nogs.org/calendar/

#### **ADMISSION:**

With reservation ...... \$30.00 Without reservation...... \$35.00 Student Member with reservations...... FREE

> March 23 Children's Museum of St. Tammany Celebration Castine Center • Mandeville, LA For more information, www.cmstkids.org

VOLUNTEERS March 29 NEEDED! Supersaurus Saturday Louisiana Children's Museum • New Orleans, LA For more information, www.nogs.org

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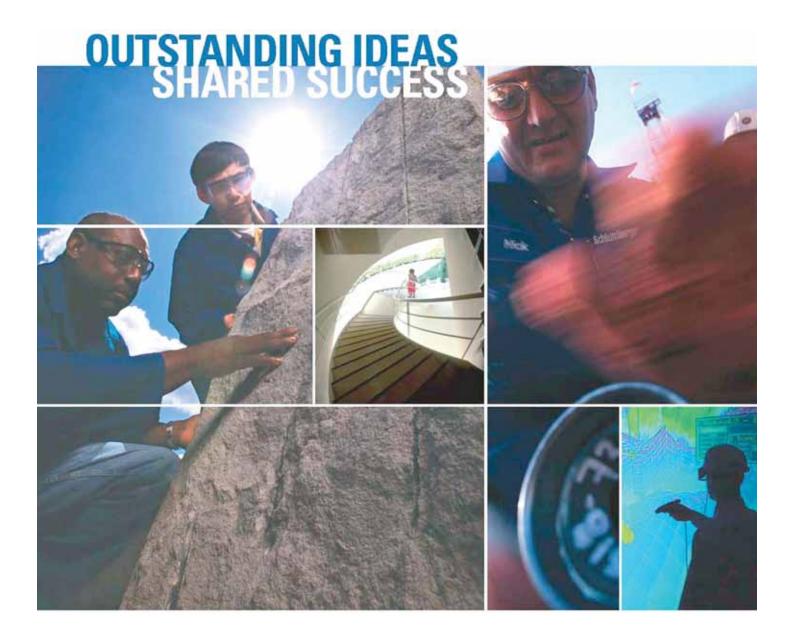
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## March 10 NOGS Luncheon Presentation

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## **Rethinking Coastal Restoration**



Presented by

Chris McLindon New Orleans, Louisiana

## ABSTRACT

The fundamental concepts underlying coastal restoration were formulated in the 1960's and 1970's as it became obvious that the total surface area of the wetlands of south Louisiana was decreasing at a measurable rate. The situation has been generally characterized as an ecological crisis in which the wetlands are being deteriorated by coastal erosion and the rate of land loss is unprecedented in human history. The causes of coastal erosion have been universally attributed to the activities of humans. Oil and gas drilling and pipeline canals have allowed saltwater intrusion to accelerate erosion, and the levee system along the Mississippi River has prevented a natural cycle of flooding that would replenish the marsh with freshwater and sediment. The solution to this crisis, and the foundation of coastal restoration, is that humans must intercede to reverse the rate of wetlands loss. These concepts have become the axiomatic truths of the coastal restoration movement, and they are rarely questioned. An examination of the science behind the formation of the coastal wetlands brings into question all of these fundamental concepts, along with the viability of human intercession.

The coastal wetlands of southeast Louisiana are the delta marshes of the Mississippi River. Six to eight historical deltas are generally recognized to have deposited the sedimentary substrate of the marshes across the area during the Holocene highstand in global sea level. Each of these deltas exhibits the patterns of a natural lifecycle from emergence to abandonment to subsidence. The rates of sediment accumulation and subsidence of these deltas can be related to the underlying geologic structure of the coastal plain. The area of delta deposition during the Holocene is roughly coincident with the span of delta deposition during these two epochs. This evaluation strongly suggests that the current rate of wetlands loss is due largely to subsidence driven by geologic processes that have been active on the coastal plain since the Middle Miocene.

An examination of coastal restoration projects that have been in operation over the past 20 years reveals that they have been largely ineffective in reversing the rate of wetlands loss in southeast Louisiana. In the face of the magnitude of geologic processes that are driving the rate of subsidence causing the submergence of the coastal wetlands it is unlikely that any of the active or proposed coastal restoration projects will be capable of offsetting that rate.

## BIOGRAPHY

**Chris McLindon** received a B.S. in Geology degree from L.S.U. in 1979. He has been employed as an exploration geologist in the oil and gas industry in New Orleans since graduation, including eight years of self-employment. Throughout the course of his career Mr. McLindon maintained a very strong interest in the processes of the Mississippi River and its current and historical delta. He has actively researched the subject throughout his career with periods of scientific investigation and evaluation. All of the research and scientific evaluation included in this presentation were undertaken during periods of self-employment. All of the content and opinions expressed in the presentation are solely those of Chris McLindon, and he is not acting as a representative of any entity other than himself.

Mr. McLindon is a member of the American Association of Petroleum Geologists and the Geological Society of America.

## THE LUNCHEON RESERVATION DEADLINE IS MARCH 6 - CONTACT THE NOGS OFFICE

## "And Looking Ahead . . . "

The next luncheon will most likely be on April 10 and held as a joint SGS-NOGS meeting with Kurt Marfurt, Ph.D., of the University of Oklahoma in Norman, Oklahoma, presenting. Look for more information as it becomes available on the website and in the April NOGS LOG. Contact the NOGS office at 561-8980 or use the PayPal link on the NOGS website (www.nogs.org) to make your reservation.

At the same time oil companies stopped hiring so many college graduates because they did not need any more people; in fact they had too many. As a result, universities cut back or eliminated their petroleum industry programs. That was the time, about 1990 to 1995, that the oil industry employment dearth started.

When oil companies laid off their staff, the children of the oil industry workers felt and saw the ups and downs and insecurity of work in the oil industry. What had once been a good career with a steady income was no longer true. On top of that, oil was perceived as a bad, dirty, sunset industry, something from the past. Better to pursue the future, something with potential like investment banking, computers, or the internet and dotcom enterprises. The family had been broken.

When the price of oil increased and the shale boom started, oil companies looked to hire again in 2005, but the new people weren't there in the numbers needed. The universities didn't have many students studying petroleum disciplines, because there was no call for their services when they started college. Universities had to gear up to produce new petroleum graduates and the oil industry had to sell itself to a new generation. New workers have joined the industry and now the demographic picture is bimodal, with lots of people older than 50, very few between 35 and 50, and some between 25 and 35.

So now the employees from the hiring binge are retiring and there are not enough people to do the work in this new boom. The oil industry is struggling to find people to work in it just when it needs them once again. I am stunned that an industry that works to provide steady cash flow from a depleting resource would not also ensure a steady flow of people to keep that cash flowing.

The chain of events that I have related shows what we as earth scientists already know; everything is connected and that a change in one part of the system brings about changes in other parts of the system. When the oil industry laid off droves of people and stopped hiring new employees from the mid-eighties to the early aughts, it set in motion the events that have led to its current employment crisis. Sometimes I think that if we could see the effects of our actions years later, maybe we would make different choices in the present.



Chuck



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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
						1	
2	3	4 Mardi Gras	5	6	7	8	
			WorldH	leavy Oil Congress - N	I.O., LA		
9	10 NOGS Luncheon Holiday Inn 11:30 AM	11	12	13	14	15	
16	17 St. Patrick's Day	18	19 NOGS Brd Mtg GOM Lease Sale 231 & 225	20	21	22	
23 St. Tammany Children's Museum Benefit 6 -10 pm	24	25	26	27	28 NOGS Social Old Rail Brewery 5 - 8 pm	29 Supersaurus Saturday 11 am - 3 pm	
30	31						

April							
Sunday	Monday	Friday	Saturday				
		1	2	3	4	5 NOGA Spring Social	
6	7	8 Exhibition - Houst	9	SGS-NOGS Joint Luncheon SGS Short Course	11	12	
13	14	15 NOGS Petroleum Geology for Non- Geologists	16 NOGS Board Meeting	Dr. Kurt Marfurt 17 nposia, B.R., LA	18 Good Friday	19	
20 Easter	21	22 Earth Day	23	24	25	26	
27	28 NOGS Golf Tournament Money Hill	29	30				

## New Orleans Geological Auxiliary News

"The objective of the Auxiliary is to promote fellowship among the wives of the members of the New Orleans Geological Society and to render assistance to NOGS upon request."

This month's *NOGS LOG* deadline happens to fall before the luncheon for spouses and friends at Porter and Luke's restaurant; therefore, I have been browsing my computer files of past NOGA officers and activities to find a memory-from-the-past photo. The big problem, of course, is deciding which photo to use. When I presented this idea at a recent board meeting everyone wanted the group to look younger and thinner than we are now. That part was pretty easy. I picked just one photo of attendees of the 2000 NOGA Past Presidents' Luncheon at Commander's Palace so that the image would be large enough for everyone to be recognizable. We will have to slip some other memory-photos into future articles.

The old photos remind me of all the years that have gone by for the Auxiliary. It has been sixty years since the New Orleans Geological Society President, Eugene Baysinger, and Past President, Ken McWilliams, requested that the ladies form an organization to promote fellowship among wives of members and to render assistance to NOGS upon request. The Auxiliary's first elected president was Mrs. D.D. Utterback.

Hopefully the members who have joined this past year and the future new members will find the fun, fellowship, and lifelong associations that have been the history of this organization.



## Peggy Rogers, NOGS LOG

**2000 Past Presidents' Luncheon at Commander's Palace** Standing: Jean Stewart, Mary Petrocco, Nelwyn Stuart, Mary Walther, Alma Dunlap, Judy Sabaté, Ruth Grimes, Ruth Ingram, Carol Andrews, Peggy Rogers Seated: Mim Brumbaugh, Earleen Rodan, June Perret, Betty Youngblood, GiGi Hancock Why can Weatherford deliver more real time data at the wellsite than any other mudlogging company?



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# **NOGS Spring Social**

Join your colleagues for drinks, hors d'oeuvres, and fun!

Friday, March 28 5:00 p.m. – 8:00 p.m.

**Old Rail Brewery 639 Girod Street** Mandeville, LA

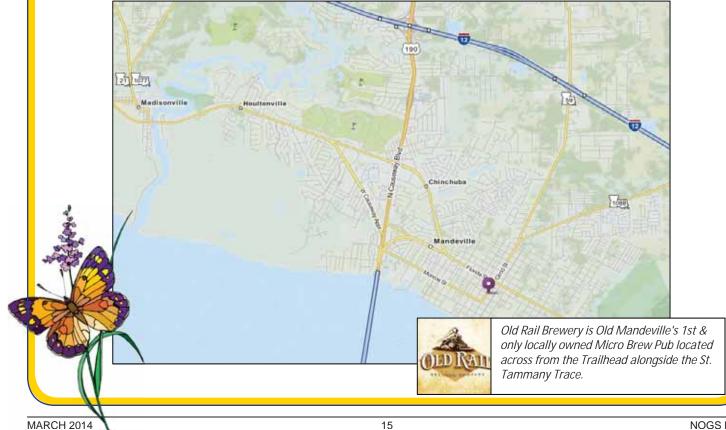
\$10/person



The Spring Social is open to all Members, spouses, and anyone wanting to join NOGS.

This event will also be the first gathering of the recently reorganized New Geoscientists of New Orleans (NGNO) group within NOGS. We hope anyone interested in being a part of NGNO will be able to attend.

Interested in joining NOGS? Come party for free! Register at the door and pay dues of \$25 (\$12.50 for students) and your admission fee will be waived.





## **COMMITTEES NEED YOU!**

## **Boy Scouts/Girl Scouts Committee:**

## A Chairman is needed.

This committee promotes and supports the Scouting movement and assists in all matters pertaining to geology, including the Geology Merit Badge Program. If you're interested, please contact Bill Whiting at Bootscon@aol.com or info@nogs.org. If there are any Eagle Scouts looking to assist in this worthy cause, it would be greatly appreciated.

## Sponsorship Committee:

## A Chairman is needed.

This committee secures funding from sponsors to help finance various activities of the Society. This committee also ensures that sponsors are thanked and adequately recognized for their generosity.



Shell has worked in partnership with the NOGS for many years, and is proud to count the society among its closest business associates.

The New Orleans Geological Society was organized in 1941 to foster scientific research and advance the science of geology. Particular emphasis is laid on the exploration for and production of petroleum and natural gas. Related objectives include encouraging the adoption of improved methods of exploration, disseminating pertinent geological and technological data, and maintaining a high standard of professional conduct among its members.

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# SUPER<br/>SAURUSVolunteers<br/>NeededSAURUSNeededSATURDAY

## March 29, 2014 11:00 AM - 3:00 PM

To volunteer contact: Tom Bergeon tom.bergeon@centuryx.com 504-832-3772

## Louisiana Children's Museum www.lcm.org

Bring your friends and family!

OVISIAN

CHILDRENS

H

## NOGS Museum Initiative - Chilo by Tom



St. Tammany Parish President Pat Brister with CMST President Lisa Barnett

Some very exciting developments are occurring on the

The Children's Museum of St. Tammany, an initiative in partnership with St. Tammany Parish and St. Tamm a 20,000 square foot, state-of-the-art children's m on I-12 just west of the Tchefuncte River and will Cultural Arts District which will include a performing an trails. In addition, in partnership with the Trace Fou St. Tammany will have a presence in Kids' Town – a Trailhead which is expected to begin construction in N

The mission of the Children's Museum of St. Tammany children to imagine, explore, and create in an inter envisions a community where play is encouraged, o enjoyed.

NOGS first became involved with CMST during their Kraig Derstler of UNO was kind enough to lend Bob They were nearly as big a hit as N.O. Saint Tracy Porte event was a great success and this year's fundraiser supporting this gala event.



Helen Hafner (daughter of NOGS past president Bob Hafner) with Super Bowl hero Tracy Porter at the 2009 Children's Museum of St. Tammany's "Night at the Museum" fundraiser



In the summer of 2013, with NOGS Museum Initiative w programs in the Greater and energy. Ed is Preside Foundation in Baton Roug

> Ed and I met with Lisa Ba and Exhibit Design Advis project and the significa The CMST site is part of natural setting with walking

vision are contagious. Kristi is an archeologist and m impressive Children's Museum of Indianapolis. We dis key contacts, volunteers, and oil industry fundraising Advisory Board, and I welcome your input as the proare some very exciting ideas that we are developing related activities. The focus is on hands-on learning an proud to be involved with this vital community learning

For more information, visit the CMST website at http:

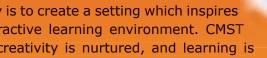
For more information on the Children's Museum of St fundraiser, please see their ad on page 22 of this new

# dren's Museum of St. Tammany

Bergeon

ne North Shore.

of the Junior League of Greater Covington nany Parish Public Schools, is developing useum. The museum will be located be part of the St. Tammany Parish rts center, amphitheater, and nature ndation, the Children's Museum of a mini-town project on Koop Drive May 2014.



2009 fund drive where the theme was "Night at the Museum." Hafner and me the full scale T-Rex and Triceratops skull casts. er, the man of the hour, fresh off his Super Bowl victory pick. The on March 23 promises to be just as engaging. Please consider

the support of the NOGS Board, Ed Picou and I kicked off the with the focus on becoming active with developing and ongoing New Orleans area with a focus on promoting earth sciences ent of the Friends of the Louisiana Museum of Natural History e and was the ideal partner to initiate this program.

arnett, President of CMST, and Kristi Jarrett, CMST Board Trustee sor. It was very exciting to see the large scope of their museum nt backing of local government and community business leaders. of a multi-purpose complex and incorporates the surrounding ng trails adjacent to the Tchefuncte River. Lisa's enthusiasm and useum specialist and was involved in developing the incredibly scussed areas where NOGS could assist with activities, designs, g support. I am honored to have been appointed to the CMST

ogram moves forward. There both with dinosaurs and oil nd interaction. NOGS is very ng experience.

://cmstkids.org/

: Tammany Celebration vsletter.





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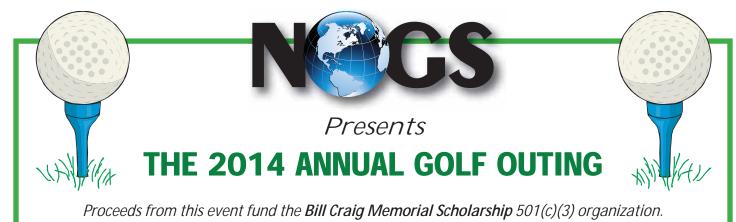
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Proceeds from this event fund the **Bill Craig Memorial Scholarship** 501(c)(3) organization Last year the golf tournament generated \$5000. Let's keep it going!

## MONEY HILL GOLF COURSE in ABITA SPRINGS on MONDAY, APRIL 28

Format: 4-person scramble with shotgun start at High Noon

Post tournament dinner sponsored by Diversified Well Logging

Registration opens at 10:00 a.m. with Brunch served until tee time. Price includes green fees, cart, range balls, food & drinks, flight, prizes, & 2 Mulligans.

What else could you possibly ask for?

Costs: \$140/individual, \$650/corporate, \$85/students. Hole sponsors are \$125.

**Please register early!** This event always fills up and we are limited to **only 120 players**. Remember you are not registered until NOGS has received payment and you are confirmed by Annette. Make sure you supply your handicap or a score that typifies a set of rounds of golf over recent time no greater than 2 years in the space provided.

We need volunteers. If you can help out, you will be treated to a day of fun, food, and be eligible for some door prizes.

Donations of any kind are welcome.

## FOR REGISTRATION, DONATIONS, OR TO VOLUNTEER, CONTACT: Annette Hudson: 504-561-8980 or <u>annette@nogs.org</u>

Send cash or check (payable to NOGS): NOGS Office • 810 Union St. • Suite 300 • New Orleans, LA 70112 Credit cards accepted with PayPal: www.nogs.org/payment-center/

Name		handicap	_@ \$140 each (\$	685 for students)
Company				@ \$650 each
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Names of others in your group:		Cash Donation	: \$	
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With the acquisitions of Plains Exploration & Production Company and McMoRan Exploration Co., FCX's diverse portfolio of minerals assets now includes high-quality oil and gas resources in the United States. Matched with bright prospects for success in the global minerals industry, this expanded scope of operations provides exciting new opportunities for profitable growth to benefit shareholders, employees and communities. FCX is pleased to announce its new subsidiary Freeport-McMoRan Oil & Gas.

FREEPORT-MCMORAN COPPER & GOLD



FREEPORT-MCMoRAN

## SUNDAY MARCH 23, 2014 6:00 – 10:00 pm

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Fundraiser benefitting the future Children's Museum of St. Tammany www.cmstkids.org

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EW ORLEANS LAND AND EXPLORATION COMPANY, LLC

February, 2014

Neuraloc Pance Into Fee

> The New Orleans Land and Exploration Company (NOLEX) is pleased to announce its association with Talos Energy LLC.

NOLEX

NOLEX will complement Talos' Gulf of Mexico exploratory efforts by exclusively generating prospects onshore South Louisiana and adjacent trends. NOLEX will target a balanced portfolio of oil prospects and high potential gas/condensate plays. The Nolex team consists of highly experienced generators including Gary Fortier, Rand Turner and Scott Wainwright who will evaluate a high quality seismic data base of over 1,500 square miles. The generating team is led by Co-Owner, Kevin McMichael, former McMoRan consultant and Sr. V.P. Exploration for LL&E, Sonat Exploration and El Paso Oil & Gas.

Co-Owner, Jim Carrington, will be responsible for all legal, land and business development activities and retain a role in Talos as Sr. Business Development Advisor.

Talos Energy is a private company founded in 2012 and led by Tim Duncan with a \$600 million private equity commitment. The management team worked together at Gryphon Exploration and Phoenix Exploration, both companies were successful private equity backed start-ups focused on acquisitions and exploration. Talos has over 27,000 sq-miles of seismic data in the GOM and South LA and they operate 90% of their 400,000 gross acres of leasehold in the Gulf of Mexico Shelf, Deepwater and South Louisiana.

## South Louisiana and Offshore Gulf of Mexico Exploration and Production Activities

LAFAYETTE DISTRICT, ONSHORE AREA By Carlo C. Christina

The Office of Conservation, Lafayette District, Onshore Area, issued 28 permits during the month of January 2014. Following are the most significant locations:

## **NEW LOCATIONS**

Hilcorp Energy has permitted the #2 Labokay in **Lyles Field**, (A), Allen Parish, located in Sec. 9, 6S-4W, to a proposed depth of 15,000 feet. The field has been abandoned since 2002. The proposed location is a direct offset to the #1 Labokay which was recently drilled to 14,620 feet. Casing was set to total depth and the operator is waiting on a completion rig. It has been reported that the well was perforated and fracked in the Upper Wilcox in several intervals between 12,600 feet and 14,362 feet. No information has been released on production tests. (247523)

In Lafourche Parish, **Leeville Field**, (B), Shoreline Southeast will drill the #2 SL 20783 in Sec. 31, 21S-22E to a proposed depth of 20,235 feet. This location is approximately one-half mile southwest of the Shoreline #1 SL 20783 which was drilled and temporarily abandoned at a depth of 19,203 feet. The proposed well is located on the extreme southwest flank of Leeville Field, approximately 2 miles southeast of production. (247468)

Strand Energy will drill a **rank wildcat**, (C), in Livingston Parish in Sec. 8, 8S-5E to a proposed depth of 10,200 feet. The well is 2 miles south of a deep test, the Tenneco #1 Crown Zellerback, which was drilled to a depth of 13,025 feet in 1986. It is also located 1 mile south of the nearest well control, a dry hole drilled in 1980 to a depth of 7,632 feet. (247586)

Bison Energy Partners will drill an interesting deep well in **Main Pass Block 35 Field**, (D), to a proposed depth of 14,300 feet. Although the #1 SL 20781 is permitted in Main Pass Block 35 field, it is located 2 miles north of production in the field. (247491)

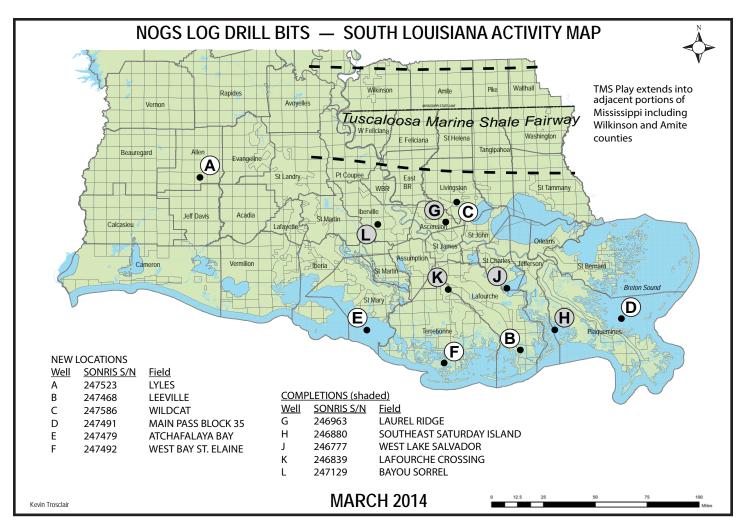
In **Atchafalaya Bay Field**, (E), St. Mary Parish, Apache Corporation will drill the #3 SL 20035 to a proposed depth of 19,750 feet to test deep Cib op sands. The proposed location is approximately 1 mile south of the Phoenix #1 SL 20035, the discovery well for the deep Cib op sands in the old field. Atchafalaya Bay Field is now the #1 ranked gas producing field in south Louisiana, having produced 45 billion cubic feet of gas in 2013. (247479)

In Terrebonne Parish, GCER Onshore is currently drilling the #2 SL 21090 at a location in Sec. 25, 22S-16E, 2 miles west of its recently completed discovery well for **West Bay St. Elaine Field**, (F). The discovery well, the #1 SL 21092, was drilled to a depth of 13,395 feet and completed as a gas well through perforations 12,441 to 12,489 feet, flowing 2192 MCFD. The discovery well is located in Sec. 21, 22S-17E, 4 miles southwest of production in the field. (247492)

## **COMPLETIONS**

In Ascension Parish, **Laurel Ridge Field**, (G), Anglo-Dutch Energy failed in its attempt to establish deep production at 15,000 feet in the Marg tex-Bol mex section. The #1 Chatham was drilled in Sec. 64, 10S-4E, 1<sup>1</sup>/<sub>2</sub> miles northeast of Mio gyp production at 12,400 feet. The well was drilled to a depth of 14,953 feet and was perforated in the objective section in the interval 14,269 to 14,280 feet. Tests were unsuccessful and the well was temporarily abandoned. (246963)

Badger Energy has plugged and abandoned the #1 SL 21081 in **Southeast Saturday Island Field,** (H), Plaquemines Parish. The well was drilled 2 miles southeast of production in Sec. 27, 19-25E, to a depth of 11,799 feet. (246880)



In St. Charles Parish, Square Mile Energy has completed another gas well in **West Lake Salvador Field**, (J). The #1 SL 21063 was drilled to a depth of 15,524 feet and completed flowing 2185 MCFD and 106 BCPD through perforations 13,534 to 13,547 feet. The well was drilled in Lake Salvador in 16S-21E, 1 mile south of production. (246777).

Square Mile Energy has plugged and abandoned its #1 Plater-Acadia in **Lafourche Crossing Field**, (K), Terrebonne Parish at a depth of 15,000 feet. The well was located in Sec. 144, 15S-16E, 2 miles southwest of the productive limits of the field. (246839)

In Iberville Parish, **Bayou Sorrel Field**, (L), Rozel Operating Co. has completed the #1 Wilberts Land as an oil well in the Cib haz section. The well was drilled in Sec. 29, 10S-11E, to a depth of 13,388 feet and completed flowing 182 BOPD through perforations 12,900 to 12,948 feet and 13,054 to 13,094 feet. (247129)

## **OFFSHORE GULF OF MEXICO** SHELF AND DEEPWATER ACTIVITIES

## by Al Baker

During January 2014, the BOEM approved **72** Gulf of Mexico drilling permits. Of these, **29** were for shelf wells and **43** were for deepwater wells. Of the total number of permits, there were **9 new well permits** issued. These included **4 shelf** (2 exploratory and 2 development), and **5 deepwater** (3 exploratory and 2 development) **new well permits**.

On the shelf, the two exploratory new well permits were granted to **Walter Oil & Gas** for their **South Timbalier 72 #1** well and to **Arena Offshore** for their **South Timbalier 151 #1** well. The two development well permits were issued to **EPL Oil & Gas** for their **South Timbalier 26 #H-1** well and their **West Delta 28 #B-6** well.

In deepwater, **Shell Offshore** was awarded two exploratory well permits to drill their **Walker Ridge 96 #1** and **Mississippi Canyon 525 #1** wells. **Apache Deepwater** also received an exploratory well permit to drill their **Garden Banks 213 #1** well. The two development well permits were given to **Stone Energy** for their **Mississippi Canyon 29 #5** well and to **ANKOR Energy** for their **Mississippi Canyon 22 #B-11** well.

On January 31st, IHS-Petrodata reported that the Gulf of Mexico mobile offshore rig supply stood at **110**. The marketed rig supply consisted of **84** rigs, of which **79** were under contract. The contracted versus total rig supply utilization rate is **71.8%**, while the marketed contracted versus marketed supply utilization rate stands at **94.0%**. The total and marketed rig supply figures reflect a decrease of 1 rig each as to those reported last month. They also compare to 82 out of the 107 rigs that were available during January 2013, for a 76.6% fleet utilization rate.

On January 31st, the BakerHughes Rig Counts indicated that there were **57** active mobile offshore rigs in the Gulf, which is **72.2%** of the rigs under contract mentioned above. This active rigs number is four less than reported last month. The current active rigs count compares to 53 active rigs during the same period last year, representing a **7.5%** increase in yearly activity.

On January 7th, **SandRidge Energy** announced that it would sell its Gulf of Mexico operations to **Fieldwood Energy**, an affiliate of private equity firm Riverstone Holdings LLC for \$750 million, plus the assumption of \$370 million in abandonment liabilities. SandRidge Energy plans to focus on drilling onshore, including the Mississippi Lime oil play in northern Oklahoma and western Kansas. SandRidge Energy is the latest company to dispose its Gulf of Mexico assets, following Apache, Devon Energy, and Callon Petroleum.

On January 7th, **Energy XXI** provided an update on its operations in the Gulf of Mexico shelf region. The **Stricker** well in **West Delta 30** was drilled to 5,897 feet measured depth (MD)/5,168 feet true vertical depth (TVD) and logged **79 net feet of oil pay** in **six reservoirs**, of which five were previously untested and are new discoveries. The well is currently being sidetracked downdip to delineate the size of the five new discoveries. The Striker well is the first well Energy XXI has drilled in West Delta 30 since its acquisition of the field in December 2010.

At West Delta 73, their Gunn well was drilled to 11,843 feet MD/8,292 feet TVD with a 1,500-foot lateral into the F-40 Sand. The well was placed on production at a rate of 300 BOPD, 125 MCFPD and 2,225 BWPD with a flowing tubing pressure of 490 psi. The next well at West Delta 73, El Diente, is preparing to spud with a proposed total depth of 10,100 feet MD/8,075 feet TVD, including a 1,000-foot lateral into the F-35 Sand.

In Energy XXI's **Main Pass 61 Field**, the **Don Carlos** well was drilled to 10,450 feet MD/8,161 feet TVD. The well was currently unloading in excess of **1,250 BOPD** from a dual completion in the **BA-4B** and **BA-4AA sands**.

The Merlin well on Vermilion 179 was drilled to 19,915 feet MD/15,700 feet TVD but subsequently plugged and abandoned after failing to find commercial hydrocarbons.

Within the ultra-deep shelf exploration program with McMoran Oil and Gas, the **Davy Jones offset** well is currently being completed. The **completion/production test** is expected during the **first half of 2014**.

Energy XXI has acquired the assets in **West Delta 32** from Black Elk Energy for **\$10.4 million**. Proved, probable, and possible reserves are estimated at **1 MMBOE**, of which **89 percent is oil**. The assets consist of 1,625 net acres and four platforms. Total production from the field was 250 BOEPD before being shut-in following an accident in November 2012.





## PETROLEUM GEOLOGY FOR NON-GEOLOGISTS

GS

A One-Day Course Tuesday, April 15, 2014 8:30 a.m. to 3:30 p.m.

Shell Auditorium • One Shell Square 701 Poydras Street • New Orleans, LA

The New Orleans Geological Society is presenting a one-day course on "Petroleum Geology for Non-Geologists." The course will consist of a brief introduction to Basic Geology, followed by a review of how oil and gas are formed, how they are concentrated into reservoirs, the geological and geophysical methods used in exploration, and an overview of drilling and completion practices.

This course should be of significant benefit and interest to anyone who in one way or another works with geologists and geological data, such as land personnel, administrative assistants, draftsmen, and computer programmers and processors.

Instructors will be Duncan Goldthwaite, consulting geologist, Bob Branson, consulting geologist, and Bruce Robertson, consulting geologist and geology professor at the University of Southern Mississippi.

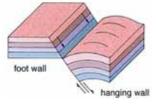
Cost will be \$35.00 per participant. Course notes and mid-morning refreshments will be provided. Interested persons can register and pay via PayPal through the Society's website www.nogs.org/payment-center/, then click on "Buy Now" under NOGS Special Events, or by sending a check for \$35.00, made out to the New Orleans Geological Society, to:

New Orleans Geological Society 810 Union Street • Suite 300 • New Orleans, LA 70112

When registering, please give your name, work or home address, email, telephone number and company affiliation, if any.

## Baton Rouge Geological Society & Louisiana Geological Survey

Fourth Annual Louisiana Subsidence & Land Loss Symposia Focus on Coastal Protection



April 16, 2014

Eighth Annual Louisiana Groundwater & Water Resources Symposia Focus on Salt Water Intrusion April 17, 2014

Dalton Woods Auditorium Energy, Coast & Environment Building Louisiana State University Baton Rouge, Louisiana

Presentation: Titles due March 10, 2014 Abstracts due April 1, 2014

For more information, email <u>dcarlson@lsu.edu</u> or go to www.brgs-la.org/

#### FOR EARLY REGISTRATION:

Fill out the registration form below, detach and send the form with a check made out to Baton Rouge Geological Society to cover all costs to the address below.

]	Baton Rouge Geological Societ L.S.U. Box 19151 Baton Rouge, LA 70803	
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Address		
City	State	Zip Code
Day Time Phone Number		_
Email Address		
If you are registering as a student	, state academic major and Univ	versity you are attending:
Signature of Advisor:		
ISTRATION FOR:		
Groundwater & Water Resources	Symposia: Student \$10	Professional \$50
Subsidence & Land Loss Sympos	sia: Student \$10	Professional \$50
Both of the symposia:	Student \$10	Professional \$75



# GEOLOGY IN ACTION

## WKYT – "Sinkhole swallows 8 Corvettes at Kentucky museum." – February 12, 2014

http://www.wkyt.com/home/headlines/ Sinkhole-swallows-8-Corvettes-at-Kentuckymuseum-245188261.html

It has been confirmed that 8 vehicles were swallowed by a sinkhole at the Sky Dome at the National Corvette Museum. According to our sister station, WBKO in Bowling Green, the sinkhole is estimated to be around 40 feet wide and 20-30 feet deep.

The museum sent out the following release, detailing this morning's incident:

"We received a call at 5:44am from our security company alerting us of our motion detectors going off in our Skydome area of the Museum. Upon arrival it was discovered that a sinkhole had collapsed within the Museum. No one was in or around the Museum at the time. The Bowling Green Fire Department arrived on the scene and secured the area.

None of the cars affected were on loan from individuals. We have contacted a structural engineer who is arriving today to assess the existing damage and stability of the surrounding areas. While the Skydome area is closed, the remainder of the Museum is still open."



## ON THE LIGHTER SIDE

## Word Search: Rocks and Minerals

Search the grid horizontally, vertically, and diagonally in all directions for the words listed below. Words may overlap.

CIIALLATSYRCMYNN MASBMTAHYCTIIIEN YZTRAUQGHCFHGYCA E U O M I N E R A L A P R R I A LRPAEMARITFRAAMA AIAESHBNFLEONTUO HTZBAOTEUIYMINPD SECONGLOMERATECN S L M A D D R P Y R I T E M A O OUTAS IENOTSEMILM YEOPTJASPERMDDCA LBAEOISAPPHIREII MRUCNITTLASABSTD RNNREGAELBBEPREU ECLNNLIYOOCLEAMM ZJGACGDETRUEPLMP

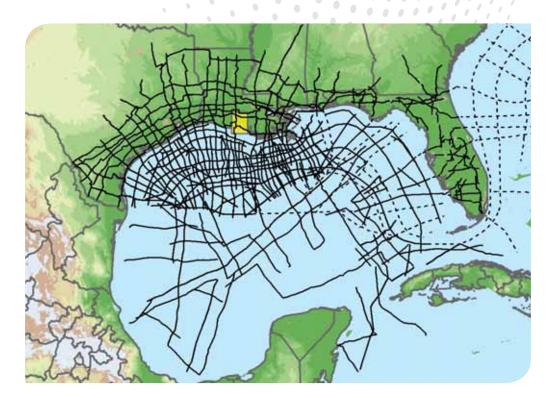
AGATE AZURITE BASALT CALCITE CARBONATE CONGLOMERATE CRYSTAL DIAMOND FELDSPAR FLINT FLUORITE GEM GNEISS GRANITE HEMATITE IGNEOUS JASPER LIMESTONE **METAMORPHIC** MICA MINERAL OBSIDIAN PEBBLE

PUMICE PYRITE QUARTZ RUBY SANDSTONE SAPPHIRE SEDIMENTARY SHALE TALC TOPAZ

Puzzle created at www.armoredpenguin.com/wordsearch/



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## INFOTIDBITS

Submitted by Sheri Richardson

#### **Rigzone.com – Karen Boman**

#### "Production from Olympus Platform in U.S. Gulf Begins." February 4, 2014

http://www.rigzone.com/news/article.asp?hpf=1&a\_id=131416

Royal Dutch Shell plc has initiated production from the Mars B development through Olympus, the company's seventh and largest floating deepwater platform in the U.S. Gulf of Mexico.

Mars B is the first deepwater Gulf project to expand an existing oil and gas field with significant new infrastructure, which Shell said should extend the greater Mars basin's life to 2050 and beyond. Future production from Olympus and the original Mars platform should deliver 1 billion barrels of oil equivalent of resources.

The Shell Mars B development includes the Olympus drilling and production platform – located in approximately 3,100 feet (945 meters) of water -- subsea wells at the West Boreas and South Deimos fields, export pipelines, and a shallow water platform at West Delta Block 143 close to the Louisiana coast. Shell is operator of the Mars B development with 71.5 percent interest. BP plc holds 28.5 percent interest.

#### Nola.com - Jennifer Larino

"North shore exploration firm buys out competition in 80-year-old oilfield." February 10, 2014 http://www.nola.com/business/index.ssf/2014/02/north\_shore\_exploration\_firm\_b.html

A startup north shore exploration company targeting some of the south Louisiana's oldest oil and gas fields is in growth mode.

Covington-based Krewe Energy has purchased the wells and other assets of two Texas firms in the Lake Long oil and gas field in Lafourche Parish. The privately held company did not disclose a purchase price.

Managing Partner Tom De Brock said the recent purchases are part of an effort to consolidate ownership of wells and leases in the 80-year-old field, a target area for the young oil and gas firm.

Krewe Energy is one of a cluster of small oil and gas firms in the New Orleans area that continue to explore and develop parts of south Louisiana long abandoned by major oil companies, scouring decades-old well data and using newer technology to pinpoint remaining reserves. Interest in extracting oil from older fields is steady thanks to favorable oil prices.

De Brock, a geologist, founded Krewe Energy in September with longtime partner Barry Salsbury. Their previous venture, S2 Energy, ended when a third business partner retired late last year. Krewe now owns many of the wells and leases that were in the S2 Energy portfolio.

Lake Long, an onshore field with oil wells dating to 1935, and drilling areas off the coast of Plaquemines Parish are among the company's focus areas. The company secured a private equity investment last year from Sage Road Capital of Houston to help fund oil and gas development and acquisitions.

De Brock said Krewe's management team had been eyeing the acreage in Lake Long owned by BLG Resources of Dallas and PDP Energy Fund of Houston for months prior to the deal.

With the purchase, Krewe now owns about 1,700 gross acres in the field.

De Brock said about 10 of Krewe's wells in the area are producing oil and gas. The company is interested in using new techniques to bring another five or so dormant wells back into production. Around 50 wells have been drilled in the area total.

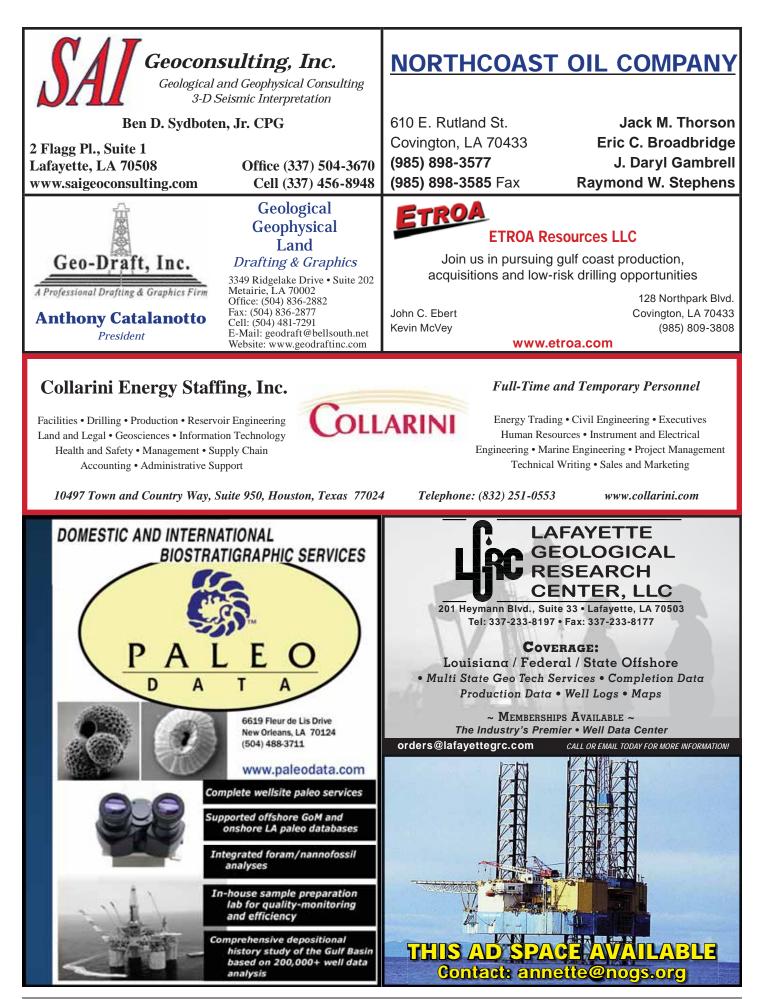
The next step is to file through stacks of old well records from Amoco Corp., the field's original owner, and later operators as well as updated digital seismic data to devise a strategy for coaxing the field back into production, he said. De Brock said the company recently hired a geologist and a reservoir engineer to guide the effort.

"It's not very romantic," De Brock said. "You make money just by going through the files, going through the notes, seeing what people were thinking back when Amoco owned it."

De Brock admitted the margins are tight for the amount of work that goes into bringing old wells back to life, a reason he said Krewe will continue to be aggressive in efforts to acquire leases in the Lake Long area owned by competitors.

De Brock guesses the company probably has about 20 prospects in the Lake Long area. But he noted only a handful of those will turn into successful wells.

"You always have to turn over 100 stones to find one diamond," De Brock said.



## THE NEW ORLEANS GEOLOGICAL SOCIETY MEMORIAL FOUNDATION, INC.

The Memorial Foundation is an IRS Tax Exempt Code #501(c)(3) organization. The Federal I.D. is 72-1220999. Please consider making a donation to the Foundation. Your individual support in any amount will help meet the IRS Guidelines for our Foundation. Thanks!

#### \$10,000

#### **Gibbet Hill Foundation**

In Memory of Steve & Marion Millendorf, William J. Prutzman, Roger G. Vincent, Ron Youngblood and Uno Numella

## \$5,000

NOGS Golf Tournament 2013 In Memory of Bill Craig

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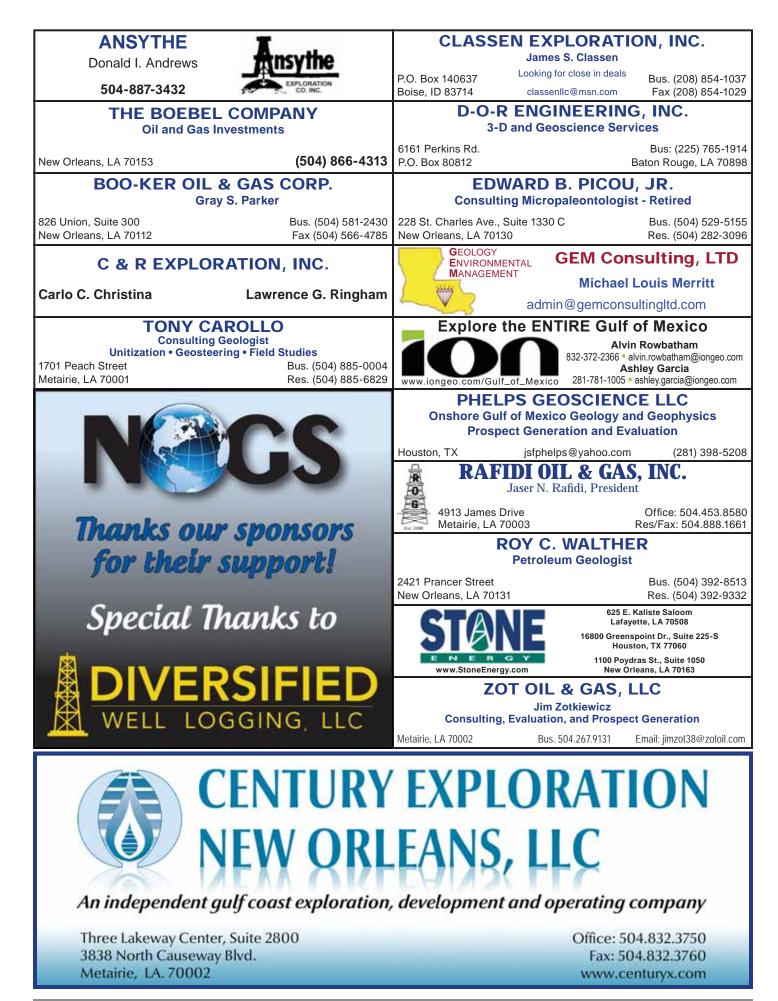
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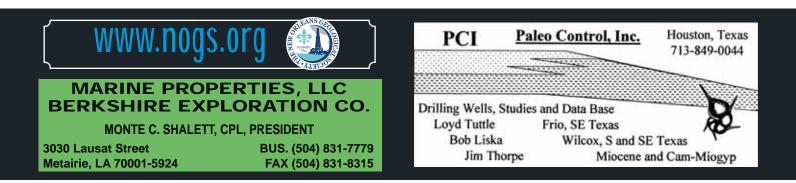


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