

# NOGS LOG

MAY 2016

Volume 56, Number 11



## MAY 2 - NOGS LUNCHEON

**Presentation: Can a Geiger Counter Provide an Inexpensive Method for  
Determining the Mining Potential for Rare Earth Elements?**

**Guest Speakers: Alexis Lang and Joshua Hartley**

**John Curtis Science Fair Winners • John Curtis Christian High School • River Ridge, LA**



RACE STARTS AT 8:30 AM

# Family Fun Eat & Run

CITY PARK • MAY 15



## BENEFITTING 3 AREA CHILDREN'S MUSEUMS



**DATE:** Sunday, May 15th, 2016

**LOCATION:** City Park at Henry Thomas Dr. & Palm Dr.  
(Site of new Louisiana Children's Museum)

**TIME:** 7:00 am: Registration  
8:30 am: 5k Run/Walk  
9:30 am: ½ Mile Run/Walk  
Mini-races for children

## COME OUT AND HAVE A GREAT TIME!

Post-race music & food including: Jambalaya, Pork Chops, Hamburgers, Hot Dogs, etc.!

For the kids: Toy prizes, bounce houses, DJ w/ karaoke, funnel cakes, snowballs.

For the adults: Beer, bloody mary's, margaritas, and more.

## PLEASE SUPPORT BY

**Register:** [NolaRunning.com](http://NolaRunning.com)

**Sponsor With a Donation:** Silver: \$250, Gold: \$500, Title: \$1000

**Sponsor Food/Beverage:** We want to provide incredible food for our runners!

## TITLE SPONSORS



## GOLD SPONSORS



FOR MORE INFORMATION: Contact Rick Fowler at: [rickf@llog.com](mailto:rickf@llog.com) • (985) 801-4323.



Published monthly by the New Orleans Geological Society.  
This issue was sent to press on April 23, 2016.

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

## IN THIS ISSUE

### Regular Features:

On The Cover.....	3
From the Editor.....	3
From the President.....	5
NOGS Officers / Contacts .....	6
Upcoming Events & Activities .....	7
NOGS Luncheon Presentation.....	8
Calendar of Events: May — September .....	11
NOGA News.....	12
Drill Bits .....	22
On the Rocks .....	27
NOGS Memorial Foundation.....	29
FONO Fund.....	29
NOGS Welcomes .....	30

### Special Features:

Family Fun Eat & Run.....	2
New 2016 Ad Rates!.....	4
NOGS 2016-17 Candidates.....	14
More Sporcle Games!.....	15
Second Line Brewing Photo Collage.....	16
National Association of State Boards of Geology.....	18
Doctor Strangeloes.....	20
LSU College of Science Office of the Dean .....	26
NOGS April Luncheon Photos .....	31

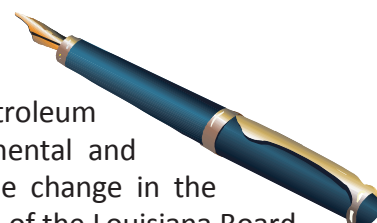
## on the cover

### Cover Photo submitted by Tom Bergeon

#### Grinnell Lake and Grinnell Falls Glacier National Park, Montana

Glacier National Park is known for its rugged alpine splendor. The ridges are late Precambrian sediments from the Belt Series which are thrust upon younger, less resistive Cretaceous sediments. The Lewis Overthrust is at lake level and the overlying older rocks were displaced 50 miles eastward along a decollement surface. The Belt Series rocks contain temperate stromatolites in the upper section in stark contrast to the current alpine conditions. George Bird Grinnell (1849-1938) was an anthropologist whose lifelong dream was to preserve wildlife and advance conservation in the American West. His work towards establishing Glacier National Park came to fruition in 1910. Grinnell's many books reflect his knowledge of the Plains Indian Tribes and the plight of the buffalo.

# From the Editor



NOGS was founded by and has been sustained by geologists working in the petroleum industry. However, we note that many of our newer members are environmental and engineering geoscientists, and we welcome their membership. This reflects the change in the federal and state regulatory rules for environmental compliance. The inauguration of the Louisiana Board of Professional Geoscience Act may have also contributed to our membership; many took advantage of the grandfathering period to become licensed P.G.'s. Now that the grandfathering period is over, Louisiana's four geoscience degree-granting universities will be offering one or more courses to prepare their matriculated students for the Association of State Boards of Geoscientists (ASBOG) Examination, one requirement for the license. The *NOGS LOG* informs you on the oil and gas industry through our Drill Bits column. To reach out to our environmental and engineering members, we will carry a regular feature geared to the licensed professional geoscientist. Georgeann McNicholas, Executive Secretary of LBOPG may attend our next NOGS meeting to answer your questions regarding PG practice and licensure.

*Tom*  
Tom Klekamp, Editor



Contact:  
Annette Hudson  
info@nogs.org

# 2016 ADVERTISING RATES

The New Orleans Geological Society was formed in 1941, with an initial membership of only 55. It has always been an active professional society and presently has a membership of 500.

AD SIZE	2015 RATE	NEW 2016 RATE!
Full Page (7.5"x10")	\$3500	\$1750
Half Page (3.75"x10" or 7.5"x5")	\$1850	\$925
Quarter Page (3.75"x5" or 7.5"x2.5")	\$1000	\$500
Eighth Page (3.75"x2.5")	\$600	\$300
Twelfth Page (3.75"x1.65")	\$375	\$188
Note Size (3.75"x.75")	\$120	\$60



## PREMIUM LOCATIONS

Inside Front Cover.....	+30%
Opposite President's Page.....	+20%
Opposite Oral Abstract.....	+20%
Inside Back Cover .....	+30%
Outside Back Cover .....	+40%



## LOUISIANA BOARD OF PROFESSIONAL GEOSCIENTISTS



APPLY FOR A LICENSE



ASBOG TESTING



REVIEW THE REQUIREMENTS

[www.lbopg.org](http://www.lbopg.org)

### PROTECTING OUR NATURAL RESOURCES

Our mission is to protect the public health, safety, and welfare and to guard the state's natural resources with regard to environmental and civil projects where a geoscientific review and evaluation is required in the making of recommendations of any geoscientific components of said projects.





## From the President

Spring is one of my favorite times of the year. It's refreshing to see the rebirth of the physical environment around us and also the improvement in people's attitudes as they emerge from the long winter doldrums. Even the petroleum industry has seemingly gotten into the spring rejuvenation act. Recently the price of oil went above \$40 for the second time this year and seems to be slowly trending upward. Worldwide demand for oil is creeping up, especially in India, and global oil production appears to be flattening. Even major producing countries are planning meetings and starting a dialogue on how best to stabilize worldwide oil prices. Is this the light at the end of the long and dark tunnel we've been in the last two years? Of course, some financial pundits are still predicting that the petroleum industry hasn't yet reached the bottom of this down cycle. But many more analysts seem optimistic that the recent upswing in commodity prices is real and that the domestic oil industry is in a slow recovery trend. So far, the cost has been tremendous, with billions of dollars in capital spending either cut or delayed, thousands of competent and hardworking employees laid off, and many companies teetering on the brink of bankruptcy. There's still a long way to go to get back to a vibrant, financially sustainable petroleum industry here in the US, but the indomitable spirit of our workforce, the best in the world, will undoubtedly get us there.

NOGS hasn't been immune to this recent financial downturn. Our annual income this year is far less than normal due primarily to a sudden lack of interest in advertising in the *NOGS LOG*. Many other local professional societies have severely cut back on social activities, educational seminars, and fundraising efforts like golf tournaments, mostly due to lack of participation and corporate sponsorships. NOGS is also struggling somewhat in this way, but our overall financial balance sheet remains strong for both NOGS and the NOGS Memorial Foundation. For the foreseeable future, NOGS should be able to fulfill most of its obligations for social and educational

sponsorships and activities as well as its awarding of annual scholarships to university students. Of course, most of the success of NOGS many activities has been, and will continue to be, due to the invaluable time and enthusiasm donated by its many volunteers.

Another opportunity for NOGS members to help with a worthy educational cause is coming up on Sunday, May 15. The first annual Family Fun Eat & Run, hosted by PIPE (Petroleum Industry Promoting Education), is scheduled to begin at 7:00 am in City Park with 5K and ½ mile runs/walks and lots of food, drink, prizes and kids activities. Proceeds benefit three children's museums in southeast Louisiana (see inside cover in this *NOGS LOG*). To register, go to [www.nolarunning.com](http://www.nolarunning.com).

Our next NOGS luncheon is scheduled for Monday, May 2, 11:30 am, at the Holiday Inn Downtown. This month presenters are two very special young future geologists from John Curtis High School who recently won 1st place from NOGS in the Greater New Orleans Science and Engineering Fair. Alexis Land, 10th grader, and Josh Hartley, 11th grader, will present their winning project entitled "Can a Geiger counter provide an Inexpensive Method for Determining the Mining Potential for Rare Earth Elements?" Last summer, NOGS provided substantial financial support for these students to finish their scientific research on a pegmatite mine in Maine. Please come to this presentation this month and give these students encouragement to continue on the right path to becoming practicing geoscientists. Make your reservations early at [www.nogs.org](http://www.nogs.org).

Soon you will be receiving either and email or snail mail ballot for the upcoming NOGS election of a new Board of Directors. Along with the ballot will be a NOGS membership renewal and an opportunity to sign up as a member of one of NOGS many committees. Please consider doing both.

See you at the next NOGS Luncheon.

**David Reiter**

## NOGS Office

Office Manager: Annette Hudson

Phone: 504-561-8980 • Email: [info@nogs.org](mailto:info@nogs.org) • Website: [www.nogs.org](http://www.nogs.org)

The office is located at 810 Union Street, Suite 300, New Orleans, LA 70112.

Correspondence and all luncheon reservations should be sent to the above address.



## BOARD OF DIRECTORS

		<b>Company</b>	<b>Phone</b>	<b>E-mail</b>
President	David E. Reiter	Stone Energy Corporation	504-593-3623	<a href="mailto:reiterde@stoneenergy.com">reiterde@stoneenergy.com</a>
Vice President	Kathy Haggar	Riparian Inc.	225-953-1076	<a href="mailto:kathy_riparian@bellsouth.net">kathy_riparian@bellsouth.net</a>
Secretary	Andrew Thorne	Freeport McMoRan Oil & Gas	504-582-4048	<a href="mailto:thorneam@yahoo.com">thorneam@yahoo.com</a>
Treasurer	Rhonda Roederer	Paleo-Data, Inc.	504-452-4370	<a href="mailto:rhonda@paleodata.com">rhonda@paleodata.com</a>
President-Elect	Al Melillo	Retired - Chevron	504-491-0683	<a href="mailto:allanmelillo@bellsouth.net">allanmelillo@bellsouth.net</a>
Editor	Tom Klekamp	Amber Resources, LLC	985-630-2480	<a href="mailto:ekle1959@gmail.com">ekle1959@gmail.com</a>
Director 2016	Jim Zotkiewicz	Zot Oil & Gas	504-799-1648	<a href="mailto:jimzot38@zotoil.com">jimzot38@zotoil.com</a>
Director 2017	J. David Cope	Rising Natural Resources LLC	504-214-6754	<a href="mailto:greatmre@aol.com">greatmre@aol.com</a>
Director 2018	Brenda Reilly		504-430-4240	<a href="mailto:brendaereilly@hotmail.com">brendaereilly@hotmail.com</a>

## COMMITTEE

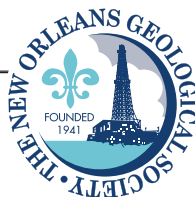
	<b>Chairperson</b>			
AAPG Delegates	William M. Whiting	Consultant	504-947-8495	<a href="mailto:bootscon@aol.com">bootscon@aol.com</a>
AAPG Student Chapter	Austin McGlannan	LSU	786-877-2040	<a href="mailto:amcgl2@tigers.lsu.edu">amcgl2@tigers.lsu.edu</a>
AAPG Student Chapter	Tushar Bishnoi	Tulane University		<a href="mailto:tbishnoi@tulane.edu">tbishnoi@tulane.edu</a>
AAPG Student Chapter	Joshua Flathers	UNO	504-952-6437	<a href="mailto:jrflathe@uno.edu">jrflathe@uno.edu</a>
Advertising-Log	TBD			
Auditing	David E. Reiter	Stone Energy Corporation	504-593-3623	<a href="mailto:reiterde@stoneenergy.com">reiterde@stoneenergy.com</a>
Awards	Michael N. Fein		504-717-6465	<a href="mailto:lfeinmn1@cox.net">lfeinmn1@cox.net</a>
Ballot	Rhonda Roederer	Paleo-Data Inc.	504-452-4370	<a href="mailto:rhonda@paleodata.com">rhonda@paleodata.com</a>
Best Paper	Bay Salmeron	Chevron	832-854-6431	<a href="mailto:bay.salmeron@chevron.com">bay.salmeron@chevron.com</a>
Entertainment	Al Melillo	Retired - Chevron	504-491-0683	<a href="mailto:allanmelillo@bellsouth.net">allanmelillo@bellsouth.net</a>
Environmental	Daisy Pate	Pontchartrain Partners	504-862-1775	<a href="mailto:daisy.pate@gmail.com">daisy.pate@gmail.com</a>
External Affairs	TBD			
Finance and Investment	Rhonda Roederer	Paleo-Data Inc.	504-488-3711	<a href="mailto:rhonda@paleodata.com">rhonda@paleodata.com</a>
Historical	Edward B. Picou, Jr.	Consultant	504-529-5155	<a href="mailto:epicou@bellsouth.net">epicou@bellsouth.net</a>
Membership/Directory	TBD			
New Geoscientists (NGNO)	Jeremy Prouhet	Chevron	985-773-6927	<a href="mailto:Jeremy.Prouhet@chevron.com">Jeremy.Prouhet@chevron.com</a>
Nominating	William M. Whiting	Consultant	504-947-8495	<a href="mailto:bootscon@aol.com">bootscon@aol.com</a>
Non-Technical Education	Duncan Goldthwaite	Consultant	504-887-4377	<a href="mailto:DGldthwt@aol.com">DGldthwt@aol.com</a>
Office Operations	Kelli Hardesty	Environmental Resources Mgmt.	504-831-6700	<a href="mailto:kelli.hardesty@erm.com">kelli.hardesty@erm.com</a>
Publications Sales	Edward B. Picou, Jr.	Consultant	504-529-5155	<a href="mailto:epicou@bellsouth.net">epicou@bellsouth.net</a>
School Outreach	Thomas C. Bergeon	Upstream Exploration	504-832-3772	<a href="mailto:tom.bergeon@upstreamexp.com">tom.bergeon@upstreamexp.com</a>
Special Projects	TBD			

## NOGS LOG STAFF

Editor	Tom Klekamp	Amber Resources, LLC	985-630-2480	<a href="mailto:ekle1959@gmail.com">ekle1959@gmail.com</a>
Editor-Elect	Laura Sorey	Chevron	985-773-1870	<a href="mailto:laura.sorey@chevron.com">laura.sorey@chevron.com</a>
Auxiliary	Peggy Rogers	NOGA	504-392-6323	<a href="mailto:lrogers79@cox.net">lrogers79@cox.net</a>
Drill Bits	Al Baker	Beacon Exploration, LLC	504-836-2710	<a href="mailto:ABaker1006@aol.com">ABaker1006@aol.com</a>
Drill Bits	Carlo C. Christina	Retired (C & R Expl. Inc.)		<a href="mailto:carlocc398@aol.com">carlocc398@aol.com</a>
Drill Bits	Kevin Trosclair		504-202-7997	<a href="mailto:kevintrosclair@gmail.com">kevintrosclair@gmail.com</a>
Staff Photographer	Arthur Christensen	Shalimar Consulting	985-893-2013	<a href="mailto:arthur_shalimar@yahoo.com">arthur_shalimar@yahoo.com</a>
Layout / Printing	Kristee Brown	Creative Graphics & Printing, LLC	985-626-5223	<a href="mailto:kpbrown@bellsouth.net">kpbrown@bellsouth.net</a>
Webmaster	Charles Miller	OCSBBS Website	504-439-3164	<a href="mailto:cmiller@ocsbbs.com">cmiller@ocsbbs.com</a>

## NOGS AUXILIARY

<b>Officers</b>		<b>Phone</b>	<b>Directors</b>	<b>Year</b>	<b>Phone</b>
President	Trudy Corona	504-737-6101	Susan Baker	2014-16	504-466-4483
Vice-President	Margie Conatser	504-469-2496	Judy Sabaté	2014-16	504-861-3179
Secretary	Peggy Rogers	504-392-6323	Alma Dunlap	2015-17	504-737-2678
Treasurer	Judy Lemarié	504-393-8659	Jean Jones	2015-17	504-738-8091
Parliamentarian	Camille Yeldell	504-835-7467			
Member-at-Large	Mary Walther	504-392-9332			



## May 2 • NOGS Luncheon

**Holiday Inn Downtown Superdome**

\$3.00 validated parking in hotel garage

### Presentation:

***Can a Geiger Counter Provide an Inexpensive Method for Determining the Mining Potential for Rare Earth Elements?***

### Guest Speakers:

**Alexis Lang and Joshua Hartley**

John Curtis Christian School • River Ridge, Louisiana

See pages 8 and 9 for Abstract and Biography

### **HOLIDAY INN DOWNTOWN SUPERDOME**

Check with concierge or  
front desk for location.

Lunch served at 11:30 am

### **ADMISSION:**

**With reservation..... \$30.00**

**Without reservation ..... \$35.00**

**Student Member with reservations..... FREE**

**May 9**

**NOGS Past Presidents Luncheon**

Ralph's on the Park • New Orleans, LA

For more information, contact [annette@nogs.org](mailto:annette@nogs.org) or 504-561-8980

**May 12**

**SGS Luncheon**

Holiday Inn Superdome • New Orleans, LA

For reservations, [www.sgs-neworleans.org](http://www.sgs-neworleans.org) or [Louis.Sturgess@shell.com](mailto:Louis.Sturgess@shell.com)

**May 15**

**PIPE Family Fun Eat & Run**

7 am Registration • 8:30 am 5k Run/Walk • 9:30 am 1/2 Mile Run/Walk

City Park (at Henry Thomas Dr. & Palm Dr.) • New Orleans, LA

Contact Rick Fowler at [rickf@llog.com](mailto:rickf@llog.com) or 985-801-4323

See page 2 (inside cover) of this issue for more information.

**June 6**

**NOGS Luncheon**

11:30 am - Holiday Inn Superdome • New Orleans, LA

Dr. G.R. "Randy" Keller - OK State Geologist & Prof. Emeritus at OSU

"Microseismicity in OK vs Microseismicity Risks in LA

For reservations, [www.nogs.org](http://www.nogs.org) or [annette@nogs.org](mailto:annette@nogs.org)

## NOGS CONTACT LIST

*Continued from previous page*

### MEMORIAL FOUNDATION

#### BOARD OF TRUSTEES

2015-2016	Chairman	Kelli Hardesty
2015-2016	Secretary	David E. Reiter
2015-2016	Trustee	William M. Whiting
2015-2016	Trustee	Art Johnson
2016-2017	Trustee	J. David Cope
2016-2017	Trustee	Tom Klekamp
2017-2018	Trustee	Chuck Holman
2017-2018	Trustee	Al Baker

### AAPG DELEGATES

#### Term Ends

2017	Elizabeth McDade
2017(a)	G. Alex Janevski
2018	Art Johnson
2018	William M. Whiting
2018(a)	Dave Balcer
2018(a)	Earl Cumming

### NEW MEMBERS

Jeff Fortenberry	Busines Development Mgr.
Brittany L. George	Student - Geosciences & Petro
Anna Strimas	Geologist

#### Company

Environmental Resources Management
Stone Energy Corporation
Consultant
Hydrate Energy Int.
Rising Natural Resources LLC
Amber Resources LLC
Beacon Exploration, LLC

#### Phone

504-831-6700
504-593-3623
504-947-8495
504-220-6208
504-214-6754
985-630-2480
504-975-6735
504-836-2710

#### E-mail

<a href="mailto:kelli.hardesty@erm.com">kelli.hardesty@erm.com</a>
<a href="mailto:reiterde@stoneenergy.com">reiterde@stoneenergy.com</a>
<a href="mailto:bootscon@aol.com">bootscon@aol.com</a>
<a href="mailto:artjohnson51@hotmail.com">artjohnson51@hotmail.com</a>
<a href="mailto:greatmre@aol.com">greatmre@aol.com</a>
<a href="mailto:ekle1959@gmail.com">ekle1959@gmail.com</a>
<a href="mailto:charleswholman@bellsouth.net">charleswholman@bellsouth.net</a>
<a href="mailto:abaker1006@aol.com">abaker1006@aol.com</a>

McMoRan Exploration Company
Shell
Hydrate Energy International
Consultant
Chevron
Reservoir Frameworks LLC

504-582-4510
504-425-6214
504-220-6208
504-947-8495
985-773-6725
985-630-6898

<a href="mailto:elizabeth_mcdade@fmi.com">elizabeth_mcdade@fmi.com</a>
<a href="mailto:gregory.janevski@shell.com">gregory.janevski@shell.com</a>
<a href="mailto:artjohnson51@hotmail.com">artjohnson51@hotmail.com</a>
<a href="mailto:bootscon@aol.com">bootscon@aol.com</a>
<a href="mailto:dbalcer@chevron.com">dbalcer@chevron.com</a>
<a href="mailto:earlcumming@bellsouth.net">earlcumming@bellsouth.net</a>

Silverthorne Seismic LLC
UNO
Environmental Auditors of America

713-591-0657
504-473-3962
504-564-7105

<a href="mailto:jeff.fortenberry@globalgeophysical.com">jeff.fortenberry@globalgeophysical.com</a>
<a href="mailto:blgeorge@uno.edu">blgeorge@uno.edu</a>
<a href="mailto:astrimas@annunciationenv.com">astrimas@annunciationenv.com</a>



# May 2 NOGS Luncheon Presentation

☆☆☆ at the Holiday Inn Superdome ☆☆☆

## Can a Geiger Counter Provide an Inexpensive Method for Determining the Mining Potential for Rare Earth Elements?

*Presented by*  
**Alexis Lang**  
and  
**Joshua Hartley**  
**John Curtis Christian School**  
**River Ridge, Louisiana**



### ABSTRACT

Rare Earth Elements (REE) help make possible the high tech world we live in today. They have become irreplaceable because of their unique magnetic, phosphorescent and catalytic properties. The U.S. stopped REE mining in 1995; since then, China has been providing 95-97% of all REE worldwide and is now limiting their export. It has become imperative that REE mining be brought back to the U.S. and that the most economically and viable REE resources be located quickly. The principal impurity in REE-bearing minerals is thorium which is radioactive. We decided to see if there was a correlation between radioactivity levels and REE content (could a Geiger counter be used to help locate REE quickly and inexpensively?)

Phase 11 focused on collecting pegmatite samples (this year we did our own sample collecting) from former quarry/mining fields in Oxford/Topsham, Maine. We used a Geiger counter in the field to help locate areas of higher mR/hr readings. Samples from six different former mining areas were collected, brought back to the lab, and then readings were taken from the whole rock. Next came the sample prep-work for Direct Coupled Plasma (DCP) analysis; this required 20 hours of milling to reduce the samples to a fine powder. HF acid was added to dissolve

the solutes and then tests were run (12 minutes per sample element) and recorded. Besides thorium, the REE analyzed were La, Ce, Nd, Em Eu, Gd, Dy, and Yb. Radiation levels collected from the Geiger counter methods were compared to the DCP (a highly quantitative, time consuming, and destructive method.)

The DCP reading directly correlated with the radioactivity levels; meaning that when the radiation was high, the REE content was more concentrated. Based on the DCP results, the highest REE content was found at Topsham 33 (0.76% REE content which approaches the desired 1% in solution); these samples also the highest radiation levels. Based on our preliminary findings, a Geiger could provide a quick, inexpensive field method to help look for viable areas to mine for REE. There is a lot more involved in REE mining but the first step is to get out there and locate the best places to start.

The DCP required very time-consuming sample preparations, but it provided a more specific measurement for a wider range of elements that the scanning electron microscope (which is what we used last year for REE identification.)





## BIOGRAPHY

Josh and Alexis have been science fair partners the past five years and have won at all levels. Their trip to Bethel, Maine, with the help of NOGS, was an amazing opportunity that allowed them to collect samples, mill them, and then run DCP analysis.

**Alexis Lang**, 10th grader, National Honor Society, Interact Club, Spirit Club, Student Council officer; Interact Club officer, 8th grade Valedictorian. Alexis wants to study science and teach high school science.

**Josh Hartley**, 11th grader, National Honor Society, Interact Club, Band, Student Council, volleyball, varsity football, 8th grade Valedictorian. Josh plans to attend a military academy and pursue engineering.

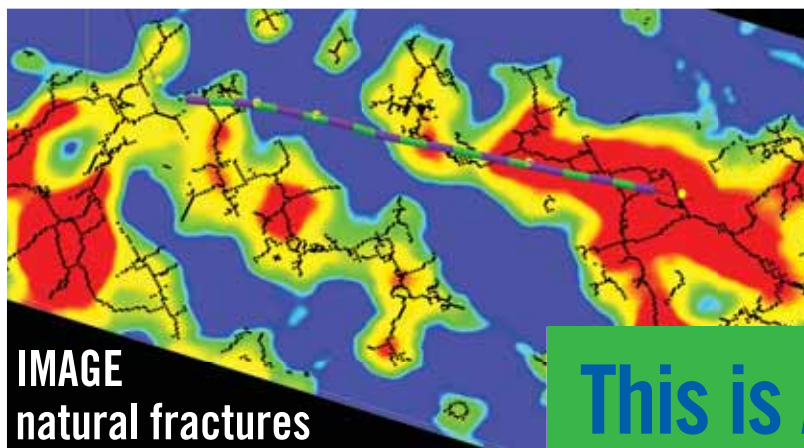
Their Science Fair Mentor, **Cathy Boucvalt**, is a science teacher at John Curtis for 23 years. She currently teaches Anatomy & Physiology and Physics. Cathy has received the Region IX Science Fair Mentor and also the teacher with the most winners six times.



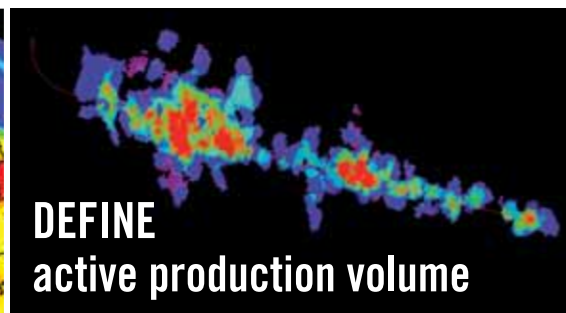
**THE LUNCHEON RESERVATION DEADLINE IS APRIL 29 - CONTACT THE NOGS OFFICE**

### *"And Looking Ahead . . ."*

The next luncheon will be held on June 6. Our guest speaker, Dr. G.R. "Randy" Keller, OK State Geologist and Prof. Emeritus at OSU, will present "Microseismicity in OK vs Microseismicity Risks in LA." Contact the NOGS office at 561-8980 or use the PayPal link on the NOGS website ([www.nogs.org](http://www.nogs.org)) to make your reservation.

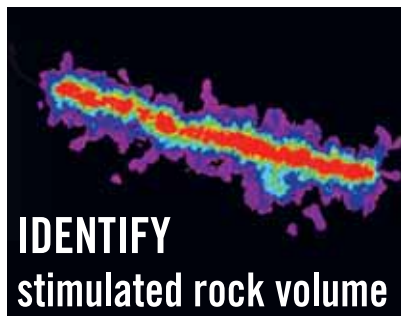


**IMAGE**  
natural fractures

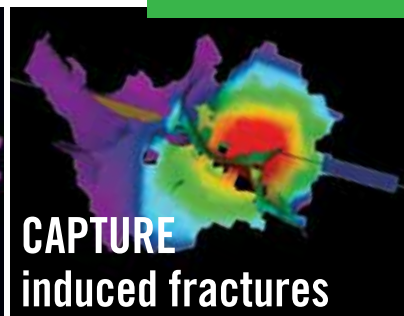


**DEFINE**  
active production volume

**This is AMBIENT Seismic.**



**IDENTIFY**  
stimulated rock volume



**CAPTURE**  
induced fractures

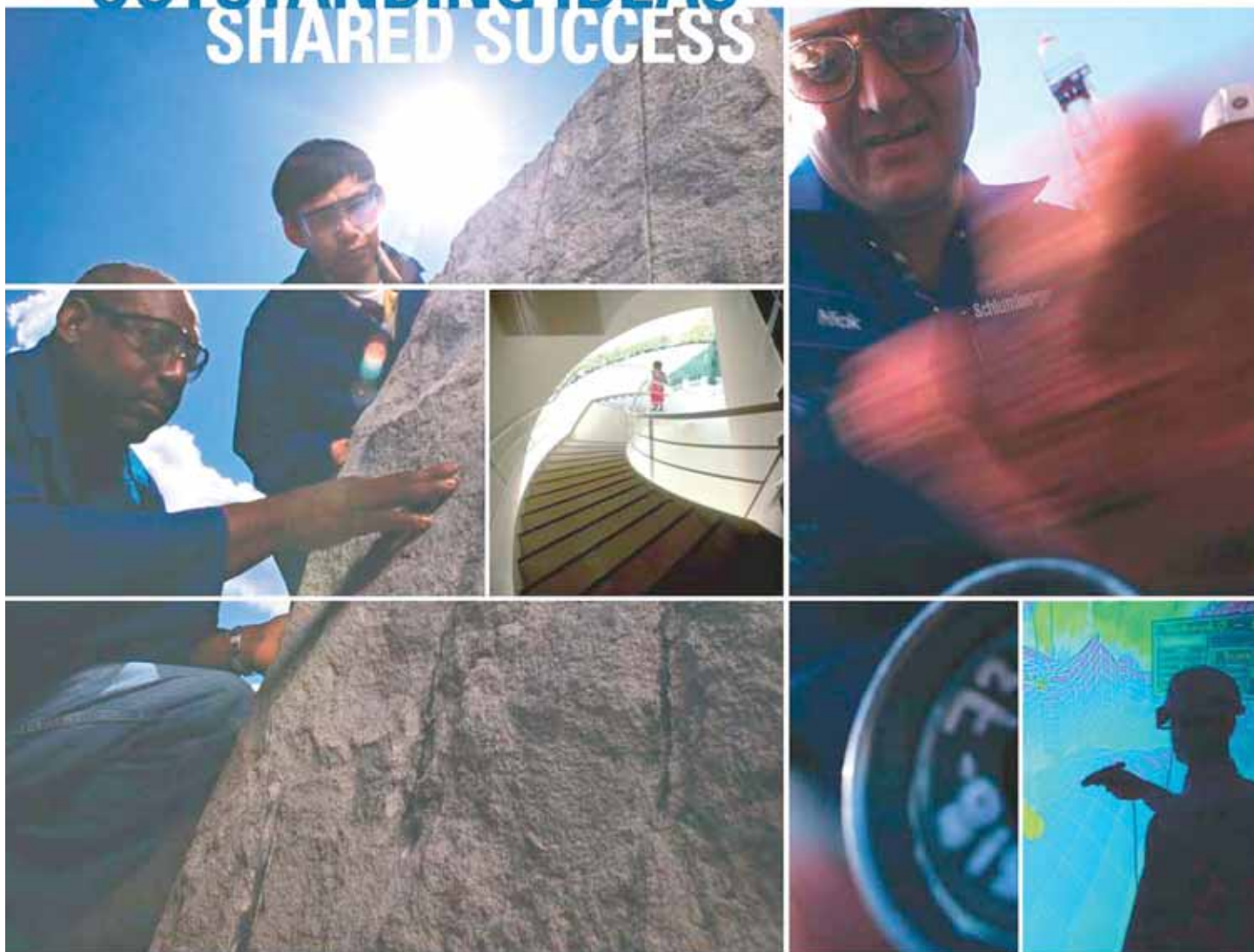
Global Geophysical's innovative approach to ambient seismic provides direct imaging of acoustic activity in the subsurface. This allows us to identify areas or zones that are acoustically active due to natural fractures, hydraulic stimulation or production-related activities. Our ambient seismic results can be presented as 3D attributes, as discrete volumes of acoustic activity or as Tomographic Fracture Images<sup>sm</sup>.

For more information:  
[www.globalgeophysical.com/AMBIENT](http://www.globalgeophysical.com/AMBIENT) or  
Contact us at [AMBIENT@globalgeophysical.com](mailto:AMBIENT@globalgeophysical.com)

Global Geophysical Services  
+1 713-972-9200 [www.globalgeophysical.com](http://www.globalgeophysical.com)



# OUTSTANDING IDEAS SHARED SUCCESS



**WHAT CAN MILLIONS OF IDEAS,** thousands of patents, and hundreds of nationalities deliver? Success. Listening to the ideas of our clients and colleagues around the globe has made Schlumberger the world's leading technical services company. Your experiences are catalysts for our innovation.

Schlumberger invests in a worldwide community of research and development centers—from Boston to Dhahran, Beijing to Moscow, Stavanger to Cambridge—encouraging our brightest minds to find new ways to improve efficiency, productivity, and safety, every day.

Through our commitment to technology research and the support of our global network of local experts, Schlumberger is leading the way into the future.

[www.slb.com](http://www.slb.com)

# Schlumberger



## CALENDAR OF EVENTS: MAY — SEPTEMBER 2016

2016	EVENT	LOCATION	CONTACT / INFO
2 May	<b>NOGS Luncheon</b> John Curtis Science Fair Winners Alexis Lang and Joshua Hartley talk about their research in Rare Earth mineralogy.	Holiday Inn Superdome	annette@nogs.org or 504-561-8980
6 May	<b>Submissions due for June NOGS LOG</b>		nogseditor@gmail.com
9 May	<b>NOGS Past Presidents Luncheon</b>	Ralph's on the Park	annette@nogs.org or 504-561-8980
12 May	<b>SGS Luncheon</b>	Holiday Inn Superdome	Louis.Sturgess@shell.com 504-425-7636
13 May	<b>Baton Rouge GS Luncheon</b>	Mike Anderson's 1031 W Lee Dr, Baton Rouge	Lisa Pultz at lisapultz@cox.net or <a href="http://www.brgs-la.org/">http://www.brgs-la.org/</a>
15 May	<b>PIPE Family Fun Eat &amp; Run</b>	City Park	See inside cover of this <i>NOGS LOG</i>
19 May	<b>SPWLA Luncheon</b>	Holiday Inn Superdome	<a href="https://www.spwla.org/chapters/new-orleans">https://www.spwla.org/ chapters/new-orleans</a>
23 May	<b>NOGS Board Meeting</b>	NOGS Office	annette@nogs.org or 504-561-8980
6 June	<b>NOGS Luncheon</b> Dr. G.R. "Randy" Keller OK State Geologist and Prof. Emeritus at OSU "Microseismicity in OK vs Microseismicity Risks in LA"	Holiday Inn Superdome	annette@nogs.org or 504-561-8980
9 June	<b>SGS Luncheon</b>	Holiday Inn Superdome	Louis.Sturgess@shell.com 504-425-7636
10 June	<b>Baton Rouge GS Luncheon</b>	Mike Anderson's 1031 W Lee Dr, Baton Rouge	Lisa Pultz at lisapultz@cox.net or <a href="http://www.brgs-la.org/">http://www.brgs-la.org/</a>
16 June	<b>SPWLA Luncheon</b>	Holiday Inn Superdome	<a href="https://www.spwla.org/chapters/new-orleans">https://www.spwla.org/ chapters/new-orleans</a>
20 June	<b>NOGS Board Meeting</b>	NOGS Office	annette@nogs.org or 504-561-8980
19-22 Jun	<b>AAPG ACE 2016</b>	Calgary, AB	<a href="http://ace.aapg.org/2016">http://ace.aapg.org/2016</a>
17-18 Aug	<b>2016 Deepwater Technical Symposium</b>	Downtown N.O. Mariott	<a href="http://www.deepwaternola.org">www.deepwaternola.org</a>
18-20 Sep	<b>GCAGS Convention</b>	Corpus Christi, TX	<a href="http://www.gcags2016.com">http://www.gcags2016.com</a>



# 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."*

On April 16th the Geological Auxiliary (with a little bit of luck) had the Spring Soirée at Jean Jones house. I'll be telling you all about it in the next *NOGS LOG* along with pictures. There should be some interesting photos of NOGS officers and special invited guests attending the Soirée in the next issue.

The NOGA Board was invited to the NOGS luncheon on April 4th for their annual treat. This is always an interesting and enjoyable day for the ladies.

For the last event of the NOGA year, Linda Peirce and Peggy Rogers are planning an Installation Luncheon at the historic Ormond Plantation Restaurant. There will be four delicious luncheon choices which include a seafood stuffed eggplant that was a big favorite at the last Ormond luncheon.



*Pictured left to right: Alma Dunlap, Director; Trudy Corona, President; Susie Baker, Director; Jean Jones, Director; Judy Lemarié, Treasurer*

The officers to be installed will be: Trudy Corona, President; Margie Conatser, Vice-President; Trez Zotkiewicz, Secretary; Judy Lemarié, Treasurer; Camille Yeldell, Parliamentarian; Mary Walther, Member-at-Large. The new board members will be joined by Linda Peirce and Ginny Melillo as directors for 2016-2018. Many thanks to Judy Sabaté, Susie Baker and Peggy Rogers who have served the Auxiliary as directors and Secretary.

The Auxiliary received a generous donation from NOGS for their participation in the Deep Water Symposium. Helping out in the registration booth is always fun and we enjoy the wonderful luncheons. The ladies are looking forward to August 16th–18th of this year to help out again.

Dot Edmund, a longtime NOGA member who has kept in touch with the NOGA membership even though she hasn't been able to participate in NOGA activities, died recently. Our sympathy goes out to Dot's family on their recent loss.

Peggy Rogers, *NOGS LOG*

## New Orleans Geological Auxiliary Membership Application

Name \_\_\_\_\_ Spouse's Name \_\_\_\_\_  
Address \_\_\_\_\_ Home Phone \_\_\_\_\_  
City, State, Zip \_\_\_\_\_ Cell Phone \_\_\_\_\_  
Spouse's Company \_\_\_\_\_ Email \_\_\_\_\_

**Dues: \$25 payable to New Orleans Geological Auxiliary**  
**Please mail to Judy Lemarié, Treasurer, #2 Yosemite Dr., New Orleans, LA 70131**



# Drill with confidence.

Diversified Well Logging, LLC brings the accuracy and expertise only a company with over sixty years in the oil and gas industry can deliver. We are your eyes and ears in the field, especially when it comes to deep water or high pressure, high temperature areas.

DWL offers 24-hour formation evaluation. We provide secure and customized real-time data communication, in-house research and development, and 24/7 on-call support for our equipment and our engineers.

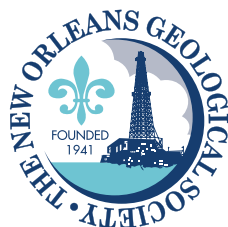
Whether you have a 10-day job or a 110-day job, we provide the specialized attention you require. **Our experience means you can be confident in the safety and performance of your well.**



- *Formation Evaluation*
- *Geosteering*
- *Drilling Optimization*
- *Real-time Data Transmission*
- *Early Kick Detection*



*Serving the Oil and Gas Industry for Over 60 Years*



## 2016-17 CANDIDATES



### For President Elect: Kathleen Haggar

Kathy Haggar studied Geology at UNO (BS) and Tulane (MS). Her first career in O&G started at the New Orleans Office of Chevron (1974-1990). During those years she worked in paleo exploration, geophysics, and production. Along the way, as for many who worked in O&G, there were dry holes, producers, and many great experiences. Among the fields she worked were Main Pass 299, West Bay, and Delta Farms. The latter provided a bridge to Greenhill Petroleum, Inc. (1990-1993) as Chevron sold properties and reduced staff. As Greenhill closed their Metairie, LA office, she started her MS at Southeastern in Hammond and made Riparian, Inc. (wetland consulting) her next career; one that spanned about 23 years. In 2013 she joined Dynamic Measurement LLC as a geologist and sales consultant. Having a diverse background in geology and in the environment, she recognizes opportunities benefitting clients in O&G as well as civil works projects. Kathy is an active member of NOGS and BRGS and has served

on their board and on committees. She is also a member of HGS and AAPG. She has volunteered on several GCAGS Conventions and contributed several professional papers to the GCAGS Transactions. She and her colleagues at Dynamic Measurement LLC received the GCAGS Grover Murray Best Paper Award for 2014 and again in 2015 for papers demonstrating lightning data analysis as a new geophysical tool.

### For Vice President: Alex Janevski

Alex Janevski is a senior geologist for Shell Exploration and Production Company where he started working full-time in 2011 after previously interning in Houston and New Orleans, and falling in love with the latter. He is originally from Cincinnati, where the fossil-rich Ordovician hills, and a good teacher, inspired a love of geology and paleontology. He earned his B.S. in geology from Case Western Reserve University (2003), and a Ph.D. from the University of Michigan in geology (2011), with a focus on invertebrate paleontology. He has spent his time at Shell developing subsea fields that tie back to the Auger platform, and is currently working on near-field exploration opportunities. Alex has been a member



of NOGS since 2012, and is also a member of AAPG, SEG, GSA, SEPM, and the Paleo Society. He serves as an alternate delegate to AAPG representing NOGS, and is the co-chair of the AAPG Annual Convention Student Poster Session sponsored by Shell. He enjoys all aspects of geology, particularly the intersection with other branches of science, statistical analysis of large datasets, and fieldwork and fossil-hunting. In his free time he can most often be found learning how to cook a Louisiana specialty, and is an accomplished camp cook.



### For Secretary: William D. (Bill) Haworth

1980 – 2015, Geologist, Chevron; retired as Senior Staff Geologist. Assignments in Exploration, Development Geology, and Geophysics; most experience as Development Geologist working Bay Marchand, Main Pass 41, and other shelf fields. He was a member of the Applied Reservoir Management Team for six years, conducting studies on reservoirs from across the Gulf of Mexico. Active in facilitating the sharing of lessons learned and best practices within the earth science community at Chevron. Early career exploration assignment in the Appalachian thrust belt, working opportunities from Pennsylvania to Mississippi. Bill earned his BS (Geology) 1977, University of Nebraska at Lincoln, and an MS (Geology) 1980, University of Nevada.

Bill is a volunteer at the Covington Food Bank, Boys and Girls Club of Covington, and St. Joseph Abbey. He is a Volunteer Geologist, Philmont Boy Scout Camp, New Mexico. He is a member of AAPG, GSA, Mississippi Geological Society, and Nevada Geological Society.



## For Treasurer: Margaret McKinney

Margaret McKinney has been a geologist with TGS since 1999. For the past 11 years she has served as Project Manager overseeing operations for TGS' Gulf of Mexico OCS new drill well log management agreement with BSEE. Prior to signing on with TGS she worked as a log analyst with Chevron for 16 years. She received her BS in Geology from Virginia Tech in 1979 and was a member of the Geophysics Department research team studying heat flow and heat generation in the Piedmont and Atlantic coastal plain. Margaret has been a resident of the New Orleans area since 1983 and is a member of NOGS and AAPG. She served as NOGS Secretary from 2013-2014.



## For Editor Elect: Sassan Mouri

Sassan Mouri is a development geologist for Chevron in Covington where he has worked on the Gulf of Mexico shelf since 2013. A native of the great state of Texas, Sassan received his M.S. in Geology from Oklahoma State University in 2006, after completing a B.S. in Geology from The University of Texas in 2004. Prior to joining Chevron, Sassan worked for seven years in the environmental industry as a geologist with Malcolm Pirnie (Houston, TX) and Environmental Resources Management (Houston, TX and Metairie, LA).

## For Director: Jennifer Connolly

Jennifer Connolly is a Staff Production Geologist with Shell, currently working for the Mars-Ursa Corridor Team. She is a native of Kentucky and received her BS in Geology from the University of Kentucky. Moving to New Orleans in 2003, she went on to receive a MS in Geology from Tulane University before joining Shell in 2005.

Jennifer is a former Trustee on the Memorial Foundation's Board of Trustees and a past Vice President and Secretary for NOGS. In addition, she is a wife and the proud mother of two.



## *More Sporcle Games!*

Sporcle is a free website with over a million user-generated games, which have had over 1.8 billion plays worldwide. Below are few more game links for your use, as a general trivia pleasure or a geology refresher.

The first game is geological, the rest are on various topics of interest.

[www.sporcle.com/games/cfxlspo/missing-word-geologic-features](http://www.sporcle.com/games/cfxlspo/missing-word-geologic-features)

[www.sporcle.com/games/cfxlspo/quick-pick-opec-members-2016](http://www.sporcle.com/games/cfxlspo/quick-pick-opec-members-2016)

[www.sporcle.com/games/cfxlspo/missing-word-animal-movies](http://www.sporcle.com/games/cfxlspo/missing-word-animal-movies)

[www.sporcle.com/games/cfxlspo/clickable-himalayan-mountain-peaks](http://www.sporcle.com/games/cfxlspo/clickable-himalayan-mountain-peaks)

[www.sporcle.com/games/cfxlspo/unscramble-world-seas-a-z](http://www.sporcle.com/games/cfxlspo/unscramble-world-seas-a-z)

Good Luck!  
Cyril Lobo







PHOTOS BY ARTHUR CHRISTENSEN



## NATIONAL ASSOCIATION OF STATE BOARDS OF GEOLOGY (ASBOG) COMPLETES SUCCESSFUL MEETING IN BATON ROUGE

Baton Rouge, La. – (April 14, 2016) – The National Association of State Boards of Geology (ASBOG) completed its inaugural Louisiana Annual Review of the Licensure Examination in Baton Rouge last weekend with several Louisiana-themed geological presentations by licensed Louisiana geologists. The national organization was hosted by the Louisiana Board of Professional Geoscientists (LBOPG).

In addition to the professional meetings and presentations, attendees were invited on a geology field trip that highlighted the region's hurricane protection system that was strengthened after Hurricane Katrina. Now that Louisiana has become a licensure state, the ASBOG Fundamentals and Practice examinations are required for PG licensure. As a result, the field trip information has provided the examination writing professionals with a stronger understanding of the geologic conditions and public protection considerations associated with an active coastal delta system.

"This was a great geologic education and experience for the subject matter experts in ASBOG," said Christopher Mathewson, PhD, PE, PG, Regents Professor, Emeritus, Texas A&M University, who served as ASBOG's Field Trip Coordinator. "The trip and supporting lectures also provided valuable new information for the professionals who write and review the Geologist Licensure Examinations."

According to meeting organizers, the initial meeting in Louisiana was set to acquaint the national and state groups with each other and to create a greater understanding of the state's professional approach to testing and licensing of geologists. ASBOG's Council of Examiners develops examination questions for the

Fundamentals of Geology and Practice of Geology Examinations, reviews each test before and after it is administered to ensure fairness. It then determines if the candidate is truly competent to practice geology before the public in matters that impact health and safety.

As part of this meeting, ASBOG offered a geology field trip for participants to broaden their geologic experience and enhance the quality of future ASBOG examination questions. The trip was led by Commissioner Mike Merritt of the Southeast Louisiana Flood Protection Authority – West (SLFPA-W), who is a licensed professional geologist in Louisiana. The field trip allowed the participants to examine geological points of interest to flood protection for the New Orleans area.

Merritt's participation in the meeting was significant because of his dual roles with the Flood Authority and ASBOG. One of the provisions of the constitutional amendment that created the Flood Authority was that three of the seven members serving on the board of commissioners come from outside the jurisdiction. His role as an expert geologist was demonstrated dramatically in the form of bringing his colleagues to the site where the federal and state governments invested nearly \$5 billion in hurricane levees and structures.

He said the experience enlightened many of his colleagues about unique south Louisiana coastal and hurricane protection issues. "The trip was focused on the role of geologists in defending the New Orleans region from geo-hazards in a dynamic deltaic environment. This was a perfect case of seeing is believing. Our

members heard about flood reform efforts affecting businesses and residents of this region. SLFPA-W was able to share its technical "know how" effectively because of prior experience staging many public meetings about geology and flood protection issues with local partners such as the Southeast Louisiana Flood Protection Authority – East (SLFPA-E), Ed Picou and the New Orleans Geological Society, and State Geologist Dr. Chacko John of the Louisiana Geological Survey."

Tour participants were interested in the geological complexity of building,





maintaining and successfully operating large projects on weak soils, like the West Closure Complex (WCC) area, one of the world's largest pumping stations and sector gates at the nexus of Jefferson and Plaquemines Parishes. More than \$4.2 billion was invested in this region on projects by the U.S. Corps of Engineers to enhance flood and hurricane protection for more than 160,000 businesses and residents on the West Bank of the Mississippi River.

"It was interesting to hear the comments from ASBOG members that related the active Mississippi delta processes and problems seen during the field trip to similar conditions at their home locations, except that the geologic history was more advanced," said Dr. Mathewson.

"We were able to point out landform characteristics indicating areas likely to lose elevation, encouraging the

sea to advance upon the coast in the future. Geological issues are important to address if we are to protect people's lives and property. That is why Louisiana must complete new geological reviews quickly. They are an investment that pays dividends over the projected lifetime of the projects (until the 2050s)," said Merritt. "With this new geological information about stability of levee foundations and location of any previously unrecognized geo-hazards, the public gains the advantage of strengthening the system even more, while operating the system more effectively and focusing maintenance effort to avoid any chance of costly waste. With the ASBOG field trip we also had the educational opportunity of a close-up view of the existing geological facts of life for flood protection and the exciting future possibilities for improving the system of flood defenses."

"The weekend was a success, because it brought together local and national geological professionals to hear about common issues," said Merritt. "This was a professional setting and we were able to accomplish our goals. This success positions Louisiana for a greater role sharing its flood protection 'know how' among national geological organizations."

#### **About the Southeast Louisiana Flood Protection Authority – West (SLFPA-W)**

The mission of the Southeast Louisiana Flood Protection Authority - West is to protect the citizens and businesses of the West Bank of the greater New Orleans area in Jefferson and Orleans Parishes from hurricanes and riverine flooding by inspecting, operating and maintaining the integrity of our levees, floodwalls and floodgates. It is composed of two levee districts: the West Jefferson Levee District in Jefferson Parish and the Algiers Levee District in Orleans Parish.

The Authority has jurisdiction over 80 miles of levees in the most populated areas of the West Bank of Jefferson Parish and in all of Orleans Parish on the West Bank, including 47 miles of levees that are part of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) and 33 miles of Mississippi River levees. Since 2006, all of the Authority's levees and floodwalls have been improved for the protection of residents in south Louisiana. For more information, visit [www.slpaw.org](http://www.slpaw.org).





# Doctor Strangeloe or How I Learned to Stop Hating Moraines and Love the Frozen Pleistocene

Growing up in Michigan, a state covered by the remnants of Tertiary glaciers, it is a true wonder that someone who lived there would ever become a geologist. They say a bird in the hand is better than two in the bush. Well, if hammer-ringing outcrops were concerned, you would be lucky if there were more than two in the hand, one coined, “The Ledges” and another somewhere in “The Thumb.” Even northern Ohio had a few limestone outcrops although they were unimpressive, unlike their spectacular fossil-laden Paleozoic cousins down to the south. Glaciologists had grand visions of four 10,000-foot high ice sheets advancing, stripping the distant Canadian Shield, and gouging the Great Lakes. The “Four Horsemen” of the glacial apocalypse weren’t even named for the places that they ransacked. The Nebraskan, Kansan, Illinoian, and Wisconsinan stages were not invited guests. They departed leaving up to 1200 feet of seemingly monotonous till blanketing the Paleozoic.

The Midwest has two seasons – the Nice and the Cold. Growing up in the Cold, my red plastic sled was the king of adventure. We never questioned the origin of that steep hill where many a toboggan would meet its match to the red sled brigade. That hill that you recklessly slid down came with a slow, grinding name: moraine. So went our sledding years. During the Nice, the gravel pit drew the adventurous. The deserted pit became a social haven after the daring few established that you could jump from the cliff above without getting hurt. Did we know that these pits were aligned in long snake-like forms alluding to their stream-like nature? An esker, you say? We couldn’t grasp that this was under an ice sheet a short time ago geologically even if the water temperature was a clue.

The Cold brought plenty of snow—the icy kind. Ski areas were steep, sleety and cheap. Lateral moraines were better than drumlins or kames, but in each case the glacial deposits were never more than a 300-foot drop, two-minute ski run.

Geology called to me. The sand dune bluffs along Lake Michigan made for great weekends, and National Geographic told of marine fossils on the summit of Everest. The call was anywhere that was high and maybe dangerous.



Geo 101 seemed a good fit, a class which dealt with subductions, slickensides, rhyolites and nuée ardentes. Where had these mysterious fern-laden Carboniferous swamps or the trilobites and crinoids been hiding? Then Mount St. Helens blew its top, and I was hooked on Geology. Glaciation, fortunately, was an apologetic afterthought, a snippet, trivial in the realm of geologic time.

The summer before my fourth year of college I encountered the Holy Grail of field camp. The Tetons of Wyoming created the setting with thrust faults, uplifts, and massive exposures. We made our way into the Black Hills, Big Horns, and Idaho Belt. But then several weeks of the dramatic geology abruptly ended. The show gave way to an administrative type whom I soon discovered was—gasp—a glacial geologist. We were on that very precipice Ansel Adams made famous with his Grand Teton photograph. No words are necessary. But our glacial prof made it painfully obvious that there were far more important things going on as he droned on about stacked glacial terraces.

Mapping thrusts and underlying structures was fun, but this ended when the Holocene Schoolmaster joined us. Stow those Bruntons. We are under glacial advance. To map a retreating glacier you need a rock hammer and good set of ears. The younger cobbles give a distinct ‘tinging’





from a hammer; the older give a dull 'thud.' As this lesson was not getting a ringing endorsement from several of us, we mapped in a prominent horizon of moose dung we encountered.

Scroll forward a few years and a western zip code. Mountain hiking was a weekend escape. The alpine cliffs and meadows above 11,000 feet were glorious. Cirques, arêtes, horns and tarns; each was stunning and worthy of a brand-name logo on some exotic climbing gear. It never fazed me that these were glacial terms as they were as far from mundane as they were from the moraine. The skiing took not two but twenty powder filled minutes. In most cases the bedrock was Pre-Cambrian and firm under your boots. The geology seemed endless.

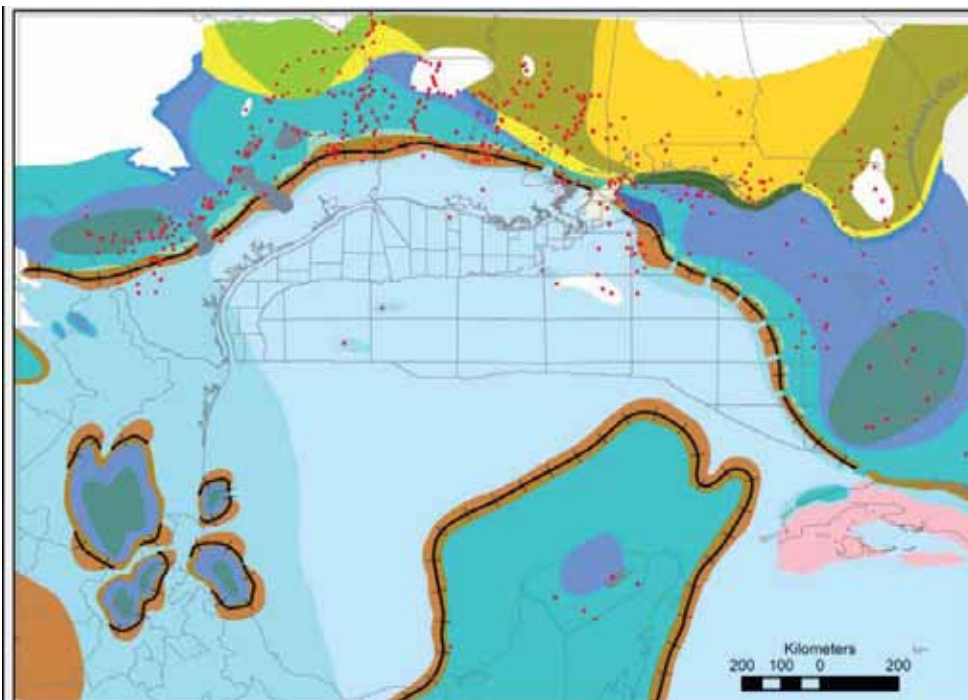
I was soon brought back to earth as my exploration job transferred down to the Mississippi Delta. Topography? Where were those rolling glacial hills and steep moraines of home? My home was below sea level, underlain by a landscape of buried swamps, and my old Pleistocene nemesis had been busy here dumping up to 20,000 feet of glacially derived deltaics from Helena to Harrisburg. At least there was the challenge of oil prospecting within that sand pile. I had to escape whenever I could back to the actual culprit, the weathered source of this flat deltaic wasteland, the rarified mountain air of Colorado. I spent many memorable days 'peak bagging', first solo then with my son.

Seeking new vistas, a fellow geologist promised Glacier National Park would not disappoint. Peaks at 9,000 feet and topping 10,000: mere trailhead elevations in Colorado. And

the park was called Glacier. Hadn't I had enough of that for one lifetime? Glacier proved more rugged than the southern Rockies; sheer cliffs and spires in every direction. The rocks were deceptively monotonous, dipping only slightly. The peaks were the Proterozoic belt series displaced at least 50 miles over less resistive Cretaceous rocks. All of it had been glacially sculpted into a spectacular Little Switzerland. After days of splendid alpine hikes and years of flatland frustration, I came to realize that maybe those glaciers back home weren't so bad after all.

*Story by Tom Bergeon.*

*Photos from Tom and National Park Service.*



### Mesozoic of the Gulf Rim and Beyond: New Progress in the Science and Exploration of the Gulf of Mexico Basin

35<sup>th</sup> Annual GCSSEPM FNDTN Perkins-Rosen Research Conference  
December 8-9, 2016 Marathon Auditorium Houston, TX  
Go to [www.gcssepm.org](http://www.gcssepm.org) for latest information

# 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 10 permits to drill during the month of March, compared to 12 permits one year ago. There are five new location of interest to report this month.*

## PART 2: BAD NEWS...GOOD NEWS...WHAT CAN WE DO ABOUT IT??

Have you read all the doom and gloom reports about the oil and gas business?

### BAD NEWS

- Total rig count for the United States is **down to 443, compared to a high of 4530 in 1981**. Only 8 rigs are running in South Louisiana.
- Massive layoffs continue with Halliburton eliminating 26,000 of its 80,000 employees.
- Freeport-McMoRan announced several top executives were leaving in a cost-cutting move.

### GOOD NEWS

- The French Quarter Festival is in full swing with 23 stages featuring excellent free entertainment and typical New Orleans food and drink.
- Crawfish season has peaked with fat, succulent mud bugs available at a reasonable price.

In the April Drill Bits report I asked 3 friends, all prominent and successful geologists, to answer the following questions:

1. What are you doing during this down period to be ready for the return of “good” oil prices?
2. What do you think the price of oil must be to trigger a turnaround--\$40, \$50, \$60 a barrel?
3. When do you think these prices might return—2 months, 6 months, 18 months, 36 months or more?

I suggest you read the April Drill Bits report where Jack Thorson, President of Northcoast Oil Company replied with several excellent comments.

Ken Huffman, geologist and partner in LaBay Exploration Co. has replied with his partners Bubba Sanchez and Lee Prout, as follows:

1. To position LaBay for the future, we reduced our overhead by seventy five percent which resulted in our relocating the office to the north shore. The plan is to work the data sets we have, try to get access to more in order to build up an inventory of plays while staying in touch with operators to be ready for the beginning of the next cycle.

2. It is hard to place a number on the price for a turnaround. As an independent I do not look at financing the deals but to others who have a demand for a prospect. This demand is my market. So I must be alert to when others feel the pricing has met their threshold to invest. The higher the product price the larger the demand for plays.

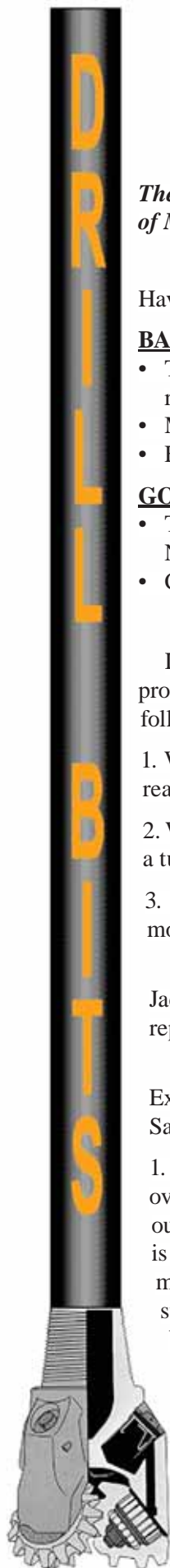
3. It is our thought that the prices will be down until at least the last quarter of 2017. The real question is what will the industry look like when the pricing is better? **Will there be enough independent operators needing plays to create a demand**, and what will define the economic criteria for a prospect in the new market to allow for acceptable risk management?

The current administration is now squeezing banks to place more pressure on energy loans. A ploy that really hurt coal companies so it is now being used on the oil industry. This will result in a correction for many companies that will have to last until the pricing can support their financials. **Until then, we plan to keep working with the optimism that there will be a benefit to the labor and hope we can catch the next rising tide.**

### NEW LOCATIONS

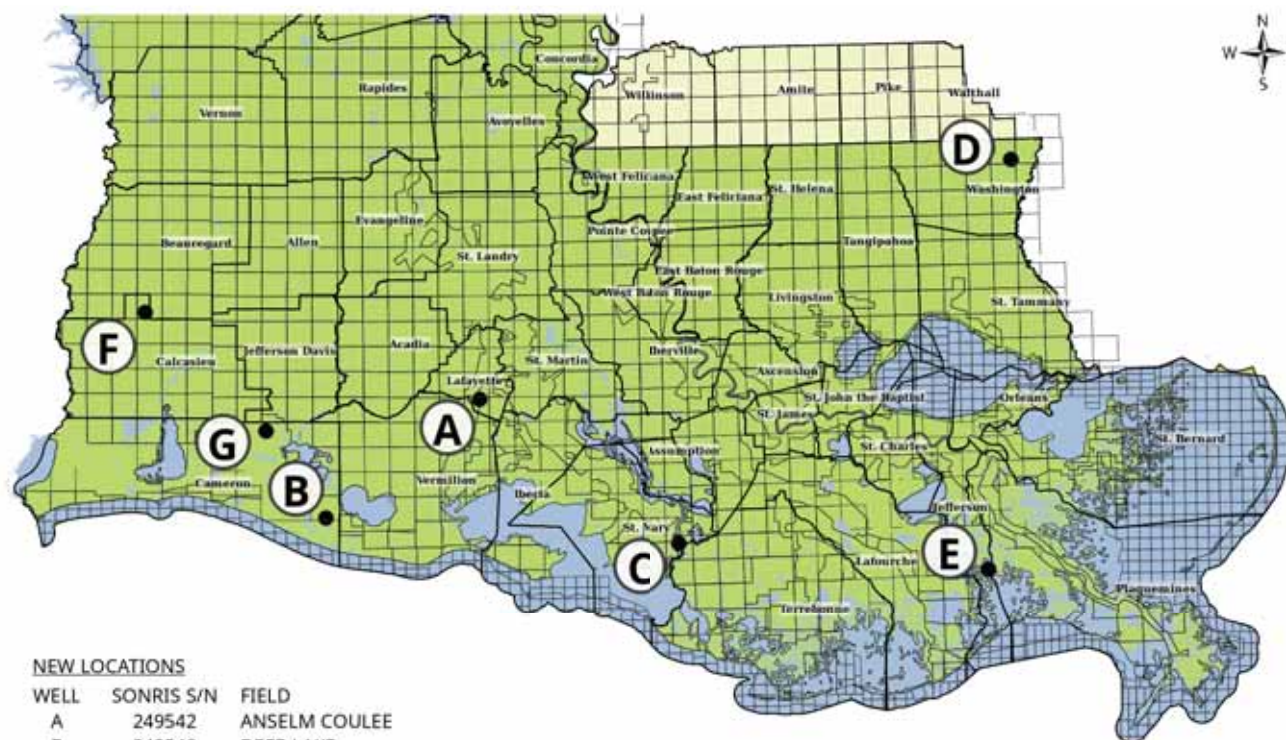
In Lafayette Parish, **Anselm Coulee Field**, (A), Karbuhn Oil Company will drill the #1 Woodrow Broussard, (SN 249542), in Sec. 3, 11S-4E to a proposed total depth of 16,400 feet to test Bol mex sands. The proposed location is more than one mile north of the productive limits of this depleted field. The current location offsets a dry hole drilled prior to discovery of Anselm Coulee Field that was drilled to a total depth of 17,953 feet and was plugged and abandoned.

Anselm Coulee was discovered in 1978 with the completion of the #1 Richard, (SN 159884), in the Marg id Sand at 12,700 feet, flowing 2581 MCFG and 87 BOPD. Subsequently, 2 additional wells were





# SOUTH LOUISIANA ACTIVITY MAP MAY 2016



## NEW LOCATIONS

WELL	SONRIS S/N	FIELD
A	249542	ANSELM COULEE
B	249540	DEEP LAKE
C	249550	BATEMAN LAKE
D	249545	WILDCAT
E	249555	MANILA VILLAGE

## COMPLETIONS

WELL	SONRIS S/N	FIELD
F	249059	PERKINS
G	249246	LACASSINE REFUGE

CCC

completed in Marg id Sands. The field went off production in 2015, after producing a total of 9.25 billion cubic feet of gas and 180,437 barrels of oil.

Hilcorp Energy is drilling the #2 Rockefeller SL2038, (SN 249540), in Cameron Parish, **Deep Lake Field**, (B), in Sec. 34, 15S-3W to a proposed total depth of 15,000 feet. The well is drilling on the northeast flank of field one mile from gas production. The offset well was completed in the 76 Sand in 1990 then re-completed in the 13,250 Sand in 1999 and 2004 and remains on production today.

In Saint Mary Parish, **Bateman Lake Field**, (C), Whitney Oil & Gas will drill the #1 SL21472, (SN 249550), in 17S-12E to a proposed total depth of 12,197 feet to test the 10900 Sand. The State Lease 21472 was acquired in August 2014 for a bonus of \$364,000, or \$350 per acre and contains 1,042 acres with a royalty of 22.5 percent.

Skylar Exploration Company will drill a **Rank Wildcat**, (D), in Washington Parish. The #1 T Williams, (SN 249545), is located in Sec. 26, 1S-13E and will be drilled to a proposed total depth of 10,200 feet targeting the Lower Tuscaloosa sands. This location is located 2 miles from a dry hole drilled in the 1964 which encountered 700 feet of massive Lower Tuscaloosa sands above 11,000 feet.

The nearest production is in Angie Field, located more than 4 miles to the northeast where deep production has

been found in the James Lime at 14,500 feet and in a Rodessa Sand at 15,700 feet.

In Jefferson Parish, LLOX will drill its #2 SL 21345, (SN 249555), in **Manila Village Field**, (E). It will be drilled to a proposed depth of 14,500 feet to test the Cib carst C Sand at 12,900 feet, in Sec. 34, 18S-24 E. The proposed bottom hole location is S 33 W 2829 feet from the surface location.

## COMPLETIONS

In Calcasieu Parish, **Perkins Field**, (F), Warhorse Oil & Gas has plugged and abandoned the #1 Forestar 29, (SN249059), in Sec. 29, 7S-10W at a total depth of 10,075 feet. The well was perforated in Cockfield sands in the intervals 9262 to 9270, 9628 to 9633, and 9642 to 9647. No results of the tests were reported.

In Cameron Parish, **Lacassine Refuge Field**, (G), Shoreline Southeast completed the #13 Lacassine Co B, (SN248246), in Sec. 18, 12S-5W as a gas well in the Lower Miogyp through perforations 17,458 to 17,626 and flowed **31,019 MCF** and 132 BCPD. The well was on production 12/1/2015 and produced 4,491,846 MCF of gas and 12,127 BBLS of oil in 7 months. The well was re-completed on 1/18/16 as a gas well in the Lower Miogyp flowing 20,311 MCF and 55 BCPD through perforations at 17,412 to 17,446 and 17,458 to 17,626 feet.



# OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES

*by Al Baker*

During **March 2016**, the **BOEM** approved **60** Gulf of Mexico drilling permits. Of these, **8** were for shelf wells, and **52** were for deepwater wells. Of the total number of permits, there were **6 new well permits** issued consisting of **2 shelf** permits and **4 deepwater** permits.

The two new shelf well permits were issued to **Arena Offshore** for their **Eugene Island 341 #A-18** development well and to **Byron Energy** for their **South Marsh Island 71 #1** exploration well.

The four new deepwater well permits included **3** exploration wells and **1** development well. The three exploration new well permits were awarded to **Anadarko Petroleum** for their **Walker Ridge 51 #4** well, to **Cobalt International Energy** for their **Keathley Canyon 129 #1** well, and to **LLOG Exploration Offshore** for their **Mississippi Canyon 560 #1** well.

The one development new well permit was issued to **BP Exploration & Production** for their **Mississippi Canyon 822 #13** well.

On March 24th, **IHS-Petrodata** reported that the Gulf of Mexico mobile offshore rig supply stood at **116**, which are **7** less than reported last month. The marketed rig supply consisted of **68** rigs, of which **45** were under contract. The marketed contracted versus total rig supply utilization rate is **38.8%**, while the marketed contracted versus marketed supply utilization rate stands at **66.2%**. The marketed rig supply number is **4** less than reported last month; the contracted rig supply number is **3** less than reported last month. In contrast, the March 2015 fleet utilization rate stood at 55.9% with 62 out of the 111 rigs under contract.

On March 24th, **BakerHughes** indicated that there were **27** active mobile offshore rigs in the Gulf of Mexico, which is **60%** of the rigs under contract mentioned above. This active rigs number is the same as reported last month. The current active rigs count compares to 33 active rigs during the same period last year, representing an **18.2%** drop (minus 6 rigs) in yearly rig activity.

For an interesting experience, visit the **BakerHughes** website page at: <https://us.gis.connect.bakerhughes.com/rigcountweb/default2.aspx> to view an interactive map showing the locations of the current U.S. rig count. By applying various filters to the map, one can view rig locations in specific regions of the U.S. By selecting the Locations Filter for Offshore, a map of the rig locations (shown by

triangles) in U.S. Gulf of Mexico can be displayed. Clicking on an individual triangle pops-up an information box with well information for each specific well.

As of March 24th, the **BakerHughes** total U.S. rig count stood at **464** rigs **down 76.7%** from the **September 26, 2014 high** of **1931** rigs. The previous lowest combined count was 488 rigs on April 23, 1999. Of the 464 rigs, **372** were **oil rigs**. The remaining **92** rigs are **gas rigs**, which is the **lowest number in the BakerHughes dataset that extends back to 1987**. Incidentally, the **Henry Hub price of natural gas on March 4, 2016** was **\$1.49/MMCF**, which is the lowest posted price since 1995.

On March 8th, **Otto Energy** announced that their operating partner, **Byron Energy**, had reached the intermediate casing depth of 7,837 feet MD/7,684 feet TVD on their **South Marsh Island 6 #2** well. During the drilling of the F sand intervals, three hydrocarbon bearing sands were encountered. The **F20, F30 and F40 sands** found **10, 32 and 60 feet measured depth hydrocarbon bearing sand thicknesses**, respectively. Current operations on the well are preparing to run 9 5/8" casing prior to drilling ahead into the primary **G20 target sand interval**.

On March 23rd, the **BOEM** held the **Eastern Gulf of Mexico OCS Sale 226** and the Central Gulf of Mexico OCS Sale 241 in New Orleans. Exploration spending cuts were reflected in the lease sale results as **no bids** were received on the **Eastern Gulf** tracts, and only **148 bids on 128 blocks** were received in the **Central Gulf** sale. OCS Sale 241 was the **second worst area-wide sale** since OCS Sale 104 held in April 1986, when 129 bids were received on 114 blocks. The **winning bids** in the current sale totaled **\$156.4 MM**, which is the **fourth lowest** amount in the Central Gulf since area-wide sales began in 1983. In addition, the winning bid total experienced a **71% decline** from last year's spending.

A total of **26 companies** submitted bids, including **27 shelf** bids and **121 deepwater** bids. This represents a nine company decline from last year's Central Gulf sale in which 35 companies offered 195 bids on 169 tracts. Compared to last year, **shelf bidding** was **down 40%** (27 vs. 45), and **deepwater bidding** was **down 19.3%** (121 vs. 150). **Houston Energy, L.P.** submitted the **largest number of high bids** totaling **21**; their total exposure, however, was only **\$1,528,052**. **Shell Offshore, Inc.** exposed the **most money** by spending **\$24,933,488** on **12 high bids**. The sale's **highest bid** of **\$13,687,108** was submitted on **Mississippi Canyon 434** by **Chevron U.S.A. Inc.** and **Venari Offshore LLC**. Deepwater interest continued in the Miocene and Norphlet plays of the Mississippi Canyon area, as well as the Lower Tertiary trend.

# STRENGTH IN RESOURCES

Our history is rooted in exploration success in the natural resources business. With a growing portfolio of high-potential oil and gas targets, our future grows brighter.

[www.fcx.com](http://www.fcx.com)

 **FREEPORT-McMoRAN**

**FCX**  
LISTED  
NYSE

# SEI<sup>®</sup>

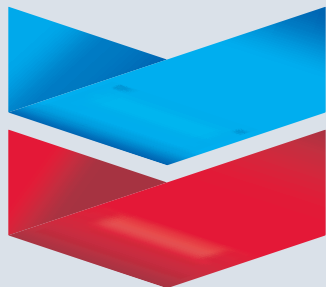
STRATEGIC SPECULATIVE SEISMIC SURVEYS  
GEOPHYSICAL DATA MARKETING & MANAGEMENT

LET US HELP YOU FIND ONE  
[WWW.SEISMICEXCHANGE.COM](http://WWW.SEISMICEXCHANGE.COM)

NEW ORLEANS  
DALLAS  
HOUSTON  
DENVER  
TULSA

SEISMIC EXCHANGE, INC.  
201 ST. CHARLES AVENUE SUITE 4300  
NEW ORLEANS, LOUISIANA 70170-4300  
PHONE: (504) 581-7153 FAX (504) 581-9591

# Chevron



100 Northpark Blvd.  
Covington, LA 70433

(985) 773-6000



## LaBay

Exploration Co., L.L.C.

1070 A West Causeway Approach  
Mandeville, Louisiana 70471

Office (985) 951-2012  
Fax (985) 951-2055

[www.labayexploration.com](http://www.labayexploration.com)

# LLDG

exploration



### Covington Office

1001 Ochsner Blvd., Suite 200  
Covington, Louisiana 70433

p: 985.801.4300

f: 985.801.4796

### Houston Office

CityCentre Three  
842 W Sam Houston Pkwy N  
Suite 600

Houston, Texas 77024

p: 281.752.1100

f: 281.752.1199

### Scott Office

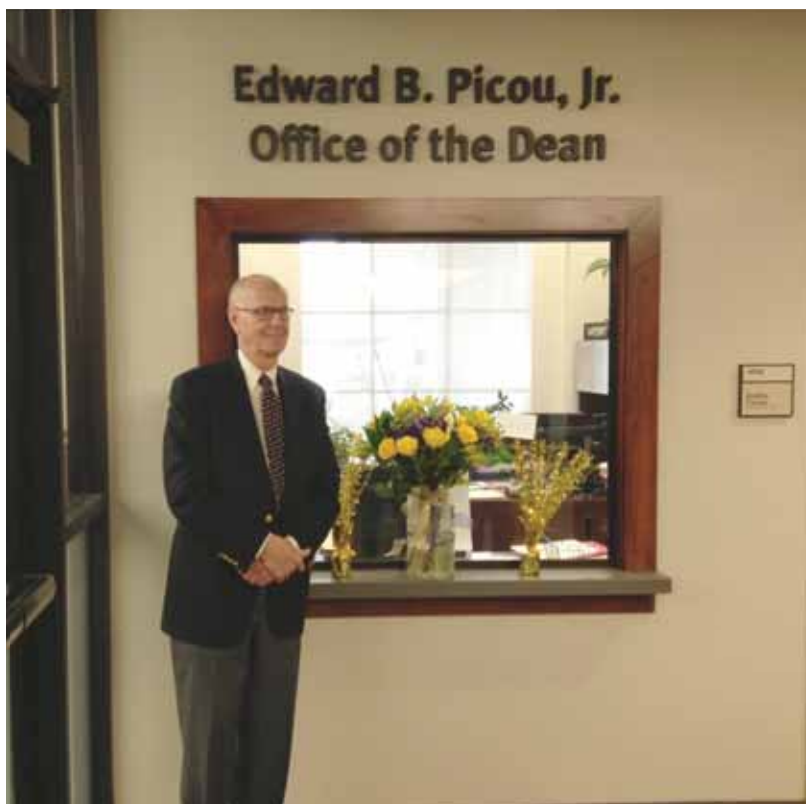
814 S. Frontage Rd.  
Scott, LA 70583

p: 337.408.4000

f: 337.408.4049

[www.llog.com](http://www.llog.com)

## LSU College of Science Newly Furnished Office of the Dean



We congratulate Ed Picou for underwriting the cost of furnishings of the new Edward B. Picou, Jr. Office of the Dean of the College of Science at Louisiana State University. The Dean's Office is a suite of six or more offices, plus two conference rooms. Ed has been a long-time supporter of the College of Science. This year he was recognized for ten years of membership on the Executive Committee in the Dean's Circle. In 2007 he was inducted into the LSU College of Science Hall of Distinction. Mr. Picou is a charter member of the LSU Geology Alumni Advisory Council, and was chair of that group for more than ten years, helping to raise funds for scholarships and the LSU Colorado Field Camp. He has served for a number of years on the College of Basic Sciences Development Council, and two years as chair of the Executive Committee.



## Dinosaurs and Downturns

Shortly after writing this piece I will have taken part of one of the most important annual events, for NOGS, Supersaurus Saturday. Organized by Tom Bergeon, this event caters to the imagination and intellectual curiosity of kids in a hands-on, engaging way at the Louisiana Children's Museum. When I signed up for the event I felt obliged to admit to Tom that I had been one of the rare geology undergrads who demonstrated very little interest in paleontology in general and even less expertise on dinosaurs specifically. I swear I can hear my undergrad department head sighing as he reads that sentence. While Tom assured me this would hardly be an impediment to my volunteering, I can't help but continue to laugh at the unexpected situation I find myself in.

Which I suppose isn't altogether dissimilar to the situation that many geologists find themselves in at this moment. Just as I am entirely uncertain of the difference between an Allosaurus and a Tyrannosaurus, we are uncertain of where the field of professional geology may take us next. Whether we work for an oil company and cringe every time we see the crude ticker or if we're working to preserve the Louisiana coastline and have no indication of what kind of political or financial support we might be faced with, the geologic community of south Louisiana is faced with an uncertain future. Yes, the market will rebound. Yes, there will be action on the coastline and project funding will become available. But when? And how?

The short answer is that I have no clue. I can't tell you why a Brachiosaurus has a long neck just as I can't tell you how the market downturn will affect my own career. But I can tell you this. It doesn't really matter. Clarification. It doesn't matter in regards to my plans for this upcoming Saturday. Cause I'm still going to be at that museum teaching kids what I do know and helping them figure out the answers I don't. And I hope that is the approach that we will continue to take as professionals and as educators. That even when we feel uncertain of our own paths that we will make the time to teach students about the importance of geology and the fundamental aspects of critical

thinking that it entails.

I have a very clear memory of the moment I decided to major in geology. I was eighteen years old and sitting in the front row of an 8:00 A.M. lecture for a Physical Earth class that I had signed up for largely on a whim. Despite being in recovery mode from a party the night before, I was being drawn into my professor's discussion of Bowen's Reaction Series, and something abruptly clicked in my mind about how it all worked. Because despite having always maintained good grades in science, I had never been passionate about any of it. I could have drawn a diagram of the sodium-potassium pump, but I'd far rather write an essay on *"The Lovesong of J. Alfred Prufrock."* But in that moment, I realized that I cared about geology. It was compelling in a way that I never imagined science could be. I wanted to understand. I wanted to figure it out. I wanted to find a way to apply that knowledge to something challenging and useful.

We have an obligation to help students find that moment of clarity in whatever way it may manifest itself. Whether that means speaking to undergrads at your alma mater, making a donation to the NOGS scholarship fund, or teaching fourth graders about the difference between halite and calcite. We can't do much to control our immediate futures, but we can influence how the scientists of tomorrow are prepared for it.



**Bryce Canyon National Park, Utah**

*Technically not a canyon, Bryce consists of a series of amphitheaters eroded into the side of the Paunsaugunt Plateau. Filling these spaces are the park's most distinctive natural features — hoodoos, pinnacles of colorful eroded sedimentary rock as tall as 200ft.*



610 E. Rutland St.  
Covington, LA 70433  
985.898.3577

Jack M. Thorson  
Eric C. Broadbridge  
Raymond W. Stephens  
J. Daryl Gambrell



**Anthony Catalanotto**  
*Manager*

**Geological  
Geophysical  
Land**

*Drafting & Graphics*

516 Maryland Avenue  
Metairie, LA 70003  
(504) 481-7291  
E-Mail: geodraft@bellsouth.net  
Website: www.geodraftinc.com

# NOGS

needs your active  
membership in  
**AAPG!**

*Renew or Join Today!*

## Collarini Energy Staffing Inc.

Facilities • Drilling • Production • Reservoir Engineering  
Land and Legal • Geosciences • Information Technology  
Health and Safety • Management • Supply Chain  
Accounting • Administrative Support



*Full-Time and Temporary Personnel*

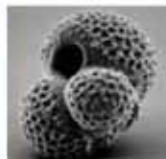
Energy Trading • Civil Engineering • Executives  
Human Resources • Instrument and Electrical  
Engineering • Marine Engineering • Project Management  
Technical Writing • Sales and Marketing

1500 S. Dairy Ashford Road, Suite 350, Houston, Texas 77077

Telephone: (832) 251-0533

[www.collarini.com](http://www.collarini.com)

**DOMESTIC AND INTERNATIONAL  
BIOSTRATIGRAPHIC SERVICES**



6619 Fleur de Lis Drive  
New Orleans, LA 70124  
(504) 488-3711

[www.paleodata.com](http://www.paleodata.com)



**Complete wellsite paleo services**

**Supported offshore GoM and  
onshore LA paleo databases**

**Integrated foram/nannofossil  
analyses**

**In-house sample preparation  
lab for quality-monitoring  
and efficiency**

**Comprehensive depositional  
history study of the Gulf Basin  
based on 200,000+ well data  
analysis**



## ROCK SOLID SERVICE



© 2013 Core Laboratories.  
All rights reserved.



**Core Lab**  
RESERVOIR OPTIMIZATION  
[www.corelab.com](http://www.corelab.com)  
**337-837-8616**

20th Annual Gulf of Mexico  
**Deepwater**  
Technical Symposium

**INNOVATION IS OUR  
FUTURE**

**AUGUST  
17th and 18th  
2016**

Downtown  
New Orleans  
Marriott  
[www.deepwatermola.org](http://www.deepwatermola.org)





## 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*

### \$2,000

#### Mr. James A. Hartman

*In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. Armour C. Winslow

*In Memory of Rita Menzel Winslow  
and Lawrence C. Menconi*

### \$500

#### Mr. Thomas C. Bergeon

*In Memory of J.W. Coltrane*

#### Kathy Rush and Charles Holman

### \$250 TO \$499

#### Mr. Jack G. Bryant

*In Memory of Gene Brumbaugh, Dick Edmund,  
A.T. Green, John Petrocco & Robert W. Sabaté*

#### Mr. Carlo C. Christina

*In Memory of Al Gilreath  
In Memory of Raymond W. "Ray" Stephens, Jr.*

#### Mr. James S. Classen

*In Memory of Tom Blakey, Dick Edmund,  
A.T. Green, and John Petrocco*

#### Mr. Dan E. Hudson

*In Memory of Raymond W. "Ray" Stephens, Jr.*

#### Paleo-Data Inc.

*In Memory of T. Wayne Campbell,  
Peggy Campbell and John Dunlap*

#### Mr. Edward B. Picou, Jr.

*In Memory of Phillip "Phil" Beron, Jr.,  
Rudolph B. "Rudy" Siegert, and  
Raymond W. "Ray" Stephens, Jr.*

#### Mr. Burton Smart II

*In Memory of Rudolph B. "Rudy" Siegert*

## FONO FUND

The FONO Fund accepts contributions that are invested and the income dedicated to assure sufficient financial resources will always be available to maintain the NOGS business office. Contributors are reminded that donations to the FONO Fund are not covered by the IRS 501(c)(3) tax exempt classification and should be reported as a business expense on your IRS tax report.

### UP TO \$249

#### Mr. David E. Balcer

#### Mr. Joseph E. Boudreaux

#### Ms. J. Sybil Callaway

#### Mr. Anthony Carollo Jr.

#### Mr. M. R. "Bob" Douglass

#### Mr. Merle J. Duplantis

#### Mr. Dwight Easterly

#### Mr. Michael N. Fein

#### Mr. Duncan Goldthwaite

#### Mr. Paul Jurik

#### Mr. Tom Klekamp

#### Ms. Jeannie F. Mallick

#### Mr. George M. Markey Jr.

#### Ms. Margaret M. McKinney

#### Mr. Richard A. Olsen

#### Mr. Bay Salmeron

#### Mr. Bryan P. Stephens

#### Mr. Roy C. Walther

#### Mr. William M. Whiting

#### Ms. Frances A. Wiseman

### UP TO \$249

#### Mr. Woods W. Allen, Jr.

*In Memory of William C. Ward*

#### Mr. Robert J. Ardell

*In Memory of A.T. Green, Rudolph B. "Rudy"  
Siegert & Raymond W. "Ray" Stephens, Jr.*

#### Mr. Maurice N. Birdwell

#### Mr. James Bourg

*In Memory of Raymond W. "Ray" Stephens, Jr.*

#### Mr. Hilary James Brook

#### Mr. Jack G. Bryant

*In Memory of Jaser N. Rafidi,  
Rudolph B. "Rudy" Siegert and  
Raymond W. "Ray" Stephens, Jr.*

#### Mr. Rob Burnett

#### Mr. Joe W. Burns

*In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. F. Robert Bussey

*In Memory of Rudolph B. "Rudy" Siegert*

#### Ms. J. Sybil Callaway

#### Chevron Humankind Matching Funds

#### Mr. and Mrs. Carlo C. Christina

*In Memory of Philip "Phil" Beron, Jr.,  
In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. M. Key Clarke

*In Memory of Raymond W. "Ray" Stephens, Jr.*

#### Trudy & Charles Corona

*In Memory of Jaser N. Rafidi, Robert T. Sellars,  
Rudolph B. "Rudy" Siegert and  
Raymond W. "Ray" Stephens, Jr.*

#### Mr. Merle J. Duplantis

#### Dr. Brooks B. Ellwood, Ph.D.

#### Mr. Lawrence B. Eustis

*In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. Michael N. Fein

#### Mr. Jeff Jandegian

*In Memory of Ronnie Youngblood  
and Dr. William W. Craig*

#### Mr. Paul Jurik

*In Memory of Thomas A. Cullinan  
In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. Thomas Klekamp

#### Mr. Roger D. Linder

*In Memory of Raymond W. "Ray" Stephens, Jr.*

#### Mr. Cyril Lobo

#### Ms. Jeannie F. Mallick

#### Ms. Margaret M. McKinney

#### Ms. Catherine D. McRae

#### Mr. Paul C. McWilliams

#### Mr. Jack Fye Minor

*In Memory of Raymond W. "Ray" Stephens, Jr.*

#### Mr. Robert G. Murphy

*In Memory of Jaser N. Rafidi  
In Memory of Rudolph B. "Rudy" Siegert*

#### New Orleans Geological Auxiliary

*In Memory of Peggy M. Campbell*

#### Mr. Richard A. Olsen

#### Mrs. Teresa O'Neill

*In Memory of Brian J. O'Neill*

#### Ms. Belinda Peace

*In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. Edward B. Picou, Jr.

*In Memory of T. Wayne Campbell,  
and "Jack" Dunlap, Jr.*

#### Mr. John C. Scheldt

*In Memory of Dr. William W. Craig*

#### Shell Matching Funds

#### Dr. J. O. Snowden

#### Ms. Betsy M. Strachan Suppes

*In Memory of Hubert C. Skinner*

#### Ms. Candace V. Strahan

*In Memory of Raymond W. "Ray" Stephens, Jr.,  
and James R. Strahan for The Bill Craig Fund*

#### Ms. Linda D. Tomlin

*In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. Larry E. Tucker

*In Memory of Rudolph B. "Rudy" Siegert*

#### Mr. William M. Whiting

#### Ms. Frances A. Wiseman

*In Memory of Steve Widdicombe*

*In Memory of Carl Grieshaber*

#### Mr. James W. Yeldell, Jr.

*In Memory of Raymond W. "Ray" Stephens, Jr.*

Contributions for both funds through March 4, 2016.  
Donations are listed for one year.

<p><b>ANSYTHE</b> Donald I. Andrews <b>504-887-3432</b></p> 	<p><b>C &amp; R EXPLORATION, INC.</b> <b>Carlo C. Christina</b>      <b>Lawrence G. Ringham</b></p>
<p><b>THE BOEBEL COMPANY</b> Oil and Gas Investments New Orleans, LA 70153      <b>(504) 866-4313</b></p>	<p><b>CLASSEN EXPLORATION, INC.</b> <b>James S. Classen</b> Looking for close in deals P.O. Box 140637      Bus. (208) 854-1037 Boise, ID 83714      classenllc@msn.com      Fax (208) 854-1029</p>
<p><b>BOO-KER OIL &amp; GAS CORP.</b> Gray S. Parker 826 Union, Suite 300      Bus. (504) 581-2430 New Orleans, LA 70112      Fax (504) 566-4785</p>	<p><b>D-O-R ENGINEERING, INC.</b> 3-D and Geoscience Services 6161 Perkins Rd.      Bus: (225) 765-1914 P.O. Box 80812      Baton Rouge, LA 70898</p>
<p><b>NOGS</b> <i>Thanks Our Sponsors for Their Support!</i> <b>\$2,500</b></p>	<p><b>EDWARD B. PICOU, JR.</b> Consulting Micropaleontologist - Retired 228 St. Charles Ave., Suite 1330 C      Bus. (504) 529-5155 New Orleans, LA 70130      Res. (504) 282-3096</p>
<p> <b>Chevron</b>  <b>Diversified Well Logging</b>  <b>Seitel</b> <b>\$1,000</b></p>	<p> <b>GEM Consulting, LTD</b> <b>Michael Louis Merritt</b> admin@gemconsultingltd.com</p>
<p> <b>Hydrate Energy International</b>  <b>ION Geoventures</b>  <b>LaBay Exploration Co. LLC</b>  <b>Paleo Data Inc</b></p>	<p><b>PHELPS GEOSCIENCE LLC</b> Onshore Gulf of Mexico Geology and Geophysics Prospect Generation and Evaluation Houston, TX      jsfphelps@yahoo.com      (281) 398-5208</p> <p><b>ROY C. WALTHER</b> Petroleum Geologist 2421 Prancer Street      Bus. (504) 392-8513 New Orleans, LA 70131      Res. (504) 392-9332</p> <p> <b>STONE ENERGY</b> www.StoneEnergy.com 625 E. Kaliste Saloom      16800 Greenspoint Dr., Suite 225-S Lafayette, LA 70508      Houston, TX 77060 1100 Poydras St., Suite 1050 New Orleans, LA 70163</p> <p><b>ZOT OIL &amp; GAS, LLC</b> <b>Jim Zotkiewicz</b> Consulting, Evaluation, and Prospect Generation Metairie, LA 70002      Bus. 504.799.1648      Email: jimzot38@zotoil.com</p>



*Submitted by Laura Sorey*

We welcome **Jeff Fortenberry**, a Business Development Manager with Silverthorne Seismic in Mercer, PA. Jeff earned his BS in Geology from the Univ. of Alabama in 1996.

**Brittany George** is a student member in her junior year from UNO where she is concentrating in the Geoscience and Petroleum Program. This summer she will be studying alpine geology at the University of Innsbruck, Austria.

**Anna Strimas** is a new active member. She is a professional geologist with Environmental Auditors of America. Anna earned a MS in Geology and Geochemistry from UNO in 2003. She lives in New Orleans. Welcome Anna!



# APRIL LUNCHEON MEETING





## NEW ORLEANS GEOLOGICAL SOCIETY

810 Union Street, Suite 300  
New Orleans, LA 70112-1430

PRSRT STD  
U.S. POSTAGE  
**PAID**  
GPI

[www.nogs.org](http://www.nogs.org)



### MARINE PROPERTIES, LLC BERKSHIRE EXPLORATION CO.

MONTE C. SHALETT, CPL, PRESIDENT

3030 Lausatz Street  
Metairie, LA 70001-5924

BUS. (504) 831-7779  
FAX (504) 831-8315

**PCI**

**Paleo Control, Inc.**

Houston, Texas  
713-849-0044

Drilling Wells, Studies and Data Base

Loyd Tuttle

Frio, SE Texas

Bob Liska

Wilcox, S and SE Texas

Jim Thorpe

Miocene and Cam-Miogyp



# creative graphics & printing, llc

*Proudly designing and printing the NOGS LOG since 2012!  
Specializing in design and printing for the oil and gas industry and their affiliates.*

ID Tags • Numbered Raffle Tickets • Banners • Signs • Posters

Letterhead • Envelopes • Business Cards • Postcards • Newsletters • Custom Forms

Logo Design • Push Cards • Table Tent Cards • Custom Invitations • Magnetic Signs & Business Cards

T-Shirts • Cups • Coozies • Pens • Hats & Caps • Coasters • USB Drives

*Full Service, Custom Graphic Design & Printing!*

985.626.5223 • 985.630.7824 • [kpbrown@bellsouth.net](mailto:kpbrown@bellsouth.net)  
or contact [annette@nogs.org](mailto:annette@nogs.org)