NOVEMBER 2013

Volume 54, Number 5

SOCIETY . THE **NOVEMBER 11 - NOGS LUNCHEON Presentation: Continuing Insights into Structure and Stratigraphy of the Onshore Gulf Basin from Pre-Stack Depth Imaging of Mega-Regional Strike Lines** from South Texas to the Florida Panhandle **Guest Speaker: Ed Haire INEXS** • Houston, Texas

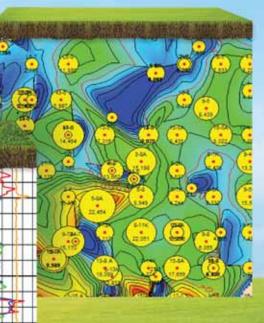
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on the cover:

Cover Photo Submitted by: Alexander Falster Amethyst Geode — Rio Grande do Sul, Brazil

Rio Grande do Sul, the southernmost state in Brazil, is one of the most prolific localities (the other being Uruguay) in the world for amethyst specimens. Amethyst geodes from southern Brazil and Uruguay occur in the basaltic rocks of the Parana Continental Flood Basalt Province. This violet variety of quartz obtains its color from trace amounts of iron and irradiation. This sample, as well as many other interesting mineral and fossil specimens, will be available at the 38th Annual Mineral Auction at UNO on November 7th.

From the Editor

I hope you all have been enjoying the cover photographs that have appeared thus far on the *NOGS LOG*. Unfortunately, our supply of member-submitted photos has been depleted. While my husband and I have plenty of vacation photos and love to share them with others, it would be great to have some more photos sent in from other NOGS members. So remember, if you have a photo of geologic interest, please send it to nogseditor@gmail.com for it to be published as the *NOGS LOG* cover photo.

Our monthly luncheon is scheduled for November 11th and NOGS will present the award for Best Paper 2012-2013 to Ricky Boehme of Chevron. Perhaps some Chevron geoscientists will be able to congratulate Ricky in person at the luncheon.

This month we are advertising the NOGS Christmas Holiday Party that will be on December 7th. Please come out and join your fellow NOGS members for a festive night filled with music, food, free drinks, and camaraderie. The parking is free and I'm sure all who attend will have a great time.

Happy Thanksgiving! Sheri Richardson – *NOGS LOG* Editor

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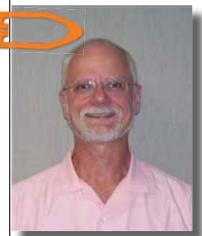
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From the President

Tropical Storm Karen formed during the first week of October and threatened to wipe out yet another GCAGS convention in New Orleans, but fortunately dry air from the northwest, shearing winds from the southwest, and cooler water kept Karen from being a major hurricane, like her older sister Katrina. Whew!

The GCAGS Annual Convention had about 800 attendees. Tropical Storm Karen kept some people away, so attendance was a little less than expected. There were a number of excellent talks and posters on all aspects of Gulf of Mexico geology. Many thanks go to Tom Klekamp, Art Johnson, George Rhoads, and Mary Walther for organizing the convention and to all the many volunteers who made it a success.

One talk from the GCAGS that stayed with me was "Retrospection on 30 years of E&P Risk Analysis" by Pete Rose. His discussion was about bias and what we think we know about our prospects. During the talk he showed a picture of some beans for about 5 seconds and asked the audience to give an 80% confidence range, low P(90) to high P(10), as to the number of beans in the picture. I estimated 500 on the low end and 1,100 on the high end. The actual number was 1,780, which means I was conservative in my estimate and probably shows I don't know how to count beans. However, the point was to show the bias of what we think we know and that our 80% confidence range on the number of "beans" or for petroleum exploration, reservoir parameters, may not adequately describe the range of risk associated with a prospect. We all have probably had an experience where we think we had it "wired" but were surprised when the subsurface turned out to be very different than what we had predicted.

UPCOMING EVENTS

November

Ed Haire, from INEXS and ION Geophysical, will present "Continuing Insights into Structure and Stratigraphy of the Onshore Gulf Basin from Pre-Stack Depth Imaging of Mega-Regional Strike Lines from South Texas to the Florida Panhandle" at the November 11th Luncheon. Ed will speak about ION Geophysical's effort to build a network of interpreted regional seismic lines for the entire Gulf of Mexico area. Come to the meeting to see the "Big Picture."

On November 13th, API will hold the 16th Annual Greater New Orleans Joint Energy Industry Association Luncheon at the Roosevelt Hotel in New Orleans. Bob Tippee, Editor of the Oil and Gas Journal, will be the speaker and the cost will be \$40 in advance and \$50 at the door. Register online at www.api-delta.org and pay via PayPal. For more information contact Peggy Bourgeois at 504-367-1721.

December

The NOGS Christmas Holiday Party will be on Saturday, December 7th from 7:00 pm to 10:00 pm at the Holiday Inn Superdome on Loyola Avenue. There will be free parking at the Holiday Inn and we will have an open bar, buffet dinner, and music from The Profiles. Please register for the Party by November 22nd and have a wonderful night out with your friends and fellow Society members.

Although fall officially started on September 21st it did not arrive in New Orleans until the first week of October when a cold front came down from the north. Temperatures dropped below 70 degrees at night and dry air replaced the oppressive humidity. For me, October, November, and December are the best months of the year to be in New Orleans. The temperatures are mild and it is dry. Sure, March and April have a similar temperature range, but they are usually rainier and more humid. Enjoy these pleasant days and "Go Saints!"

Chuck

NOGS Office

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Phone: 504-561-8980 • Email: info@nogs.org • Website: 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.

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November 11 • NOGS Luncheon

Holiday Inn Downtown Superdome

\$3.00 validated parking in hotel garage

Presentation:

Continuing Insights into Structure and Stratigraphy of the Onshore Gulf Basin from Pre-Stack Depth Imaging of Mega-Regional Strike Lines from South Texas to the Florida Panhandle

Guest Speaker:

Ed Haire INEXS

Houston, Texas

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

> November 8 UNO Mineral Auction University of New Orleans • New Orleans, LA

November 13 16th Annual Greater New Orleans Joint Energy Industry Association Luncheon Roosevelt Hotel • New Orleans, LA For more information, www.api-delta.org

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November 11 NOGS Luncheon Presentation

 $\cancel{3} \cancel{3} \cancel{3} \cancel{3}$ at the Holiday Inn Superdome $\cancel{3} \cancel{3} \cancel{3} \cancel{3}$



Continuing Insights into Structure and Stratigraphy of the Onshore Gulf Basin from Pre-Stack Depth Imaging of Mega-Regional Strike Lines from South Texas to the Florida Panhandle



Presented by Ed Haire* INEXS®

Houston, Texas

ABSTRACT

Mega-regional, 2D, pre-stack depth migrated (PSDM) strike lines can provide advances to the interpretation of the onshore Gulf Basin framework. Continuous seismic lines with consistent depth processing across nearly the full extent of the onshore portion of the basin allow onshore depocenters, structural axes, and canyons to be seen in their regional context. Plays dependent on new horizontal wells can be tied around the basin. A preliminary interpretation is presented of a key strike line that is made up of legacy onshore data and PSDM processed by ION Geophysical. The interpretation highlights a strike-view through the depoaxes of shelf margins forming while gravity sliding is occurring along the Base Louann detachment. Plays below salt welds and shale decollements show improved imaging. This is one of a series of seven strike lines of approximately 8500 miles and 380 individual line segments that ranges from a line hugging the coast to line which traverses the East Texas Salt Basin, Sabine Uplift, North Louisiana Salt Basin, Mississippi Interior Salt Basin and Wiggin's Arch to the Florida Panhandle. The strike lines tie together existing mega-regional dip lines and span across the basin from South Texas to Alabama and from the northern limit of the onshore Gulf Basin to the abyssal plain. The dip lines in some cases have been extended to tie the new strike grid. The interpretation has been tied to well control with a series of synthetics and check shot surveys and a comprehensive database of well tops.

*Co-authors: Don Howard, Barbara Radovich

BIOGRAPHY

Ed Haire has been with INEXS[®] since 1993 where he is currently the VP of Technology. He has managed many of the interpretation projects for customers including providing much of the geophysical evaluation for certain projects. He has been on long term assignment to ION where he has worked on the regional interpretation of the GOM basin for the past four years.

Ed has worked on numerous projects for customers such as Hollimon Oil, Rutherford, Drill Partners, Aspect, BP, Meridian and Torch. His expertise includes fully integrated field and project evaluations, AVO processing and analysis and detailed analyses of analog production and nearby well control. While Ed has worked on projects in the UK, Colombia and Venezuela, plus Montana, Wyoming, Colorado, Oklahoma and New Mexico, his primary focus has been onshore Texas and Louisiana and the Gulf of Mexico.

Ed received his BS degree from Texas A&M in 1972, and began working at Seiscom-Delta where he started his interpretation career, was the computer on a field crew and a land data processor. He moved in 1975 to Michigan Wisconsin Pipeline working lease sales in the GOM and in 1978 to Conoco, working onshore Texas. In 1979 Ed joined Union Texas Petroleum working the Gulf of Mexico. In 1980 he was transferred to Denver as Division Geophysicist and in addition to managing the geophysical staff, he worked the Williston Basin, the Montana disturbed belt and the Green River Basin.

Ed joined Monsanto Oil Company in Denver in 1982 as Division Geophysicist, and continued to oversee and work the Williston, Paradox, Powder River, North Park and Wind River basins. In 1986, BHP Petroleum purchased Monsanto Oil, and Ed continued to work these basins until he moved to Houston in 1987 to work the Gulf of Mexico for BHP. Ed left BHP in 1993 and joined INEXS[®].

THE LUNCHEON RESERVATION DEADLINE IS NOVEMBER 7 - CONTACT THE NOGS OFFICE

"And Looking Ahead . . . "

The next luncheon will be held on December 2nd. Our guest speaker, Randy Broussard of Bureau of Ocean Energy Management (BOEM) in New Orleans, Louisiana, will present "A Structural Analysis of The Green Knoll Salt Dome, located in Southeast Green Canyon Deep Water Gulf of Mexico." Contact the NOGS office at 561-8980 or use the PayPal link on the NOGS website (www.nogs.org) to make your reservation.

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November						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6	7	8 UNO Mineral Auction 7:00 PM	9
10	11 NOGS Luncheon Holiday Inn 11:30 AM	12	NOGA Luncheon Ormond Plantation GNO Joint Energy Industry Assoc. Luncheon	14	15	16
17	18	19	20 NOGS Board Meeting	21	22 RSVP for NOGS Christmas Holiday Party	23
24	25	26	27	28 Thanksgiving Day	29	30

	December					
Sunday Monday Tuesday Wednesday Thursday Friday				Friday	Saturday	
1	2 NOGS Luncheon Holiday Inn 11:30 AM	3	4	5	6	7 NOGS Holiday Christmas Party Holiday Inn - 7 pm
8	9	10	11 NOGS Board Meeting	12	13	14
15	16	17	18	19	20	21
22	23	24	25 Christmas Day	26	27	28
29	30	31 New Year's Eve				

New Orleans Geological Auxiliary News

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

What a way to start the NOGA 2013-2014 year! The first event was a very lovely luncheon at the home of Trudy Corona in September. Twenty-two guests, including new member Sandy Green, enjoyed great food and fellowship. NOGA welcomed Margie Conatser who joined the Auxiliary that day.



Joanne Severson, Mary Walther, and Elizabeth Furlong

The directories have been distributed. Information on any additional new members will be mailed to everyone having a directory to be incorporated in the membership. New members will be welcome to participate in all activities.

Much congratulations and appreciation goes to Mary Walther who was the NOGA representative to the GCAGS convention held in October. Mary was in charge of ladies activities and especially the Hospitality Room. The Hospitality Room was a beautiful room located on the 41st floor of the Marriott Hotel overlooking the crescent bend of the river. Refreshments were served Sunday afternoon and all day on Monday and Tuesday.

Registered spouses and guests picked up their convention gift, a cast metal dish decorated with fleurs de lis, and many came just to enjoy the view. Mary was assisted by Elizabeth Furlong,

Joanne Severson, Trudy Corona, Peggy Rogers, and Judy Lemarié, who served as hostesses in the room.

Don't miss a luncheon trip to Ormond Plantation on November 13th. Susie Baker and Jean Jones are planning an exciting day. More details will be forthcoming.

Peggy Rogers, NOGS LOG



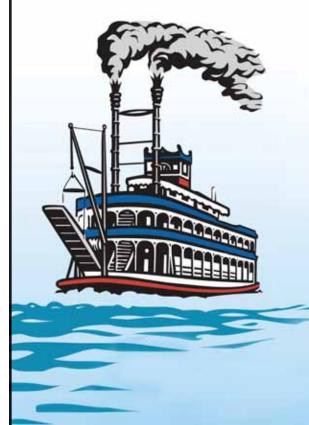
Peggy Rogers, Elizabeth Furlong, and Mary Walther

New Orleans Geological Auxiliary Membership Application			
Name Spouse's Name			
Address Home Phone			
City, State, Zip Email			
Spouse's Company DUES: \$25.00			
Please send \$25 check payable to NOGA to Judy Lemarié Treasurer #2 Yosemite Dr. New Orleans, LA 70131			

GCAGS 2013 CONVENTION - THANKS!

NOGS and the GCAGS Board express their thanks to all who attended the recently concluded convention. You helped make it a success! We had a great convention and its success was the result of the efforts of many members of the convention team who have been working for more than a year to pull all of the pieces together. GCAGS President Tom Klekamp and I offer our sincere thanks to the following team members: Robert Clark, Larissa Cupp, Mike Fein, Duncan Goldthwaite, Leah Grassi, Jack Gross, Kathy Hagar, Roger Kocken, Mike Ledet, Bob Meltz, Ed Picou, Irv Prentice, George Rhoads, Kevin Trosclair, Mary Walther, and Bill Whiting.

Bill Whiting assembled a remarkable group of volunteers, many of whom worked more than one shift. Volunteers helped with registration and other tasks. We could not have been successful without their hard work under the direction of Bill and Annette Hudson. They include:



From NOGS Fran Wiseman, Bill Furlong and Terry Mattalino

> From Desk & Derrik Dianne Badeaux

From UNO

Ryan Jones, Gerald Raymond, Gregory Pellerin, Mark Johnson, Rachel Carter, Andrew Adams, Leah Frizell, Lindsay Aucoin, Spenser Slaton, Dominik Kardell, David Cross, Andrew Boudreaux, David Cross and Cory Hinyup

> From Tulane Cynthia Palmore

From LSU Kathryn Denommee

From ULL Nicholas Geyer and Sydney Weitunat

From Baton Rouge Geological Society

Amanda Zimmerman

Jeff Agnew, professor at Tulane University, taught the Saturday teacher training workshop which introduced teachers to inquiry based activities that address fundamental earth and life science concepts using fossil shark teeth and other hands on material. Each teacher went home with an amazing assortment of shark teeth, a shark jaw, and numerous classroom activities.

Our special thanks to Arthur Christensen who volunteered as photographer throughout the convention.

If we have omitted anyone, we extend our apologies. More news will be forthcoming.

Art Johnson, General Chairman



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girl sco

S.T.E.M. Extrav

On Saturday, September 21st, over 900 girls from the Girl S Orleans Campus to take part in a Science, Technology, Engir involved including NASA, Audubon Zoo, Entergy, UNO Science Sewage and Water Board, and the Louisiana Department of V

FOLLOW

The New Orleans Geological Society presented stations on how oil fields are formed. NOGS has some newly acquired demonstration. Chevron provided oil, core, paleo, mineral sa Resources gave a workstation demonstration on mapping oil

The focus of our involvement was to show the girls that scie exploration.

Tavia Prouhet coordinated an excellent group of women earl Chloe Alexandre, Jessica Barnes, Tonya Richardson, and Jes conveying geologic concepts in understandable terms. The about what oil exploration is all about.

Thanks to everyone for a









outs aganza Event

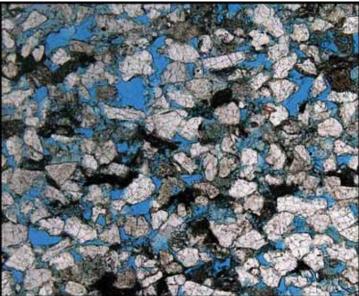
couts of Louisiana East converged on the University of New neering, and Mathematics event. Over 40 organizations were ce Departments, Society of Women Engineers, New Orleans Wildlife and Fisheries.

how oil is generated, concepts on oil and pore space, and d subsurface models that were used very effectively in the mples, and fluorescent displays. David Cope of Rising Natural prospects using 3D seismic data.

ence is fun and that there are very interesting careers in oil

th scientists from Chevron to serve as role models for the girls. sica Lopez did an excellent job interacting with the girls and girl scouts really came away with a greater understanding

wonderful learning event!



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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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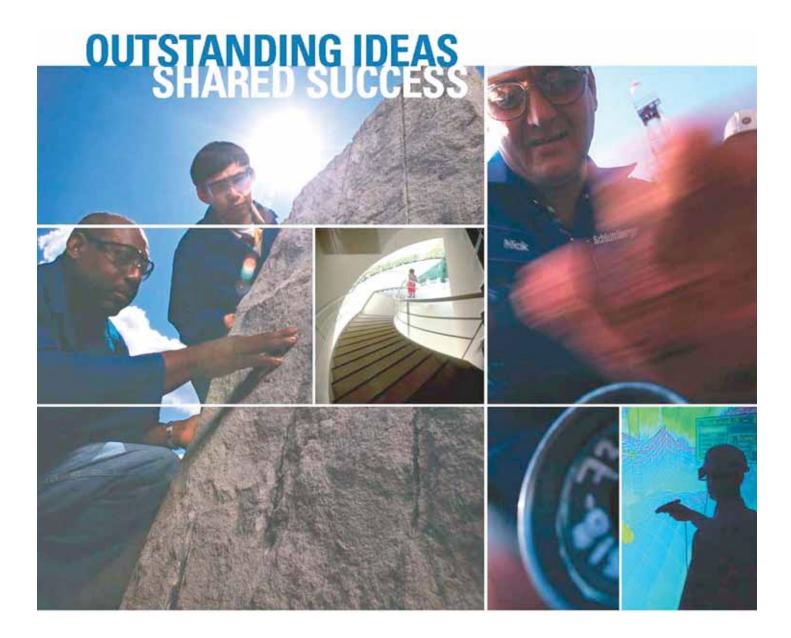
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COMMITTEE NEWS

Membership/Directory:

Dave Reiter, upon returning from working in Houston, immediately accepted the position of Membership/Directory Chairman.

New Geoscientists of New Orleans (NGNO):

Jeremy Prouhet has agreed to be Chairman of the NGNO Committee. The group will now receive funding to provide activities and be a support network for members of the Society that have less than 10 years of experience or are under 40 years of age. Anyone wishing to join that hasn't already signed up, please email info@nogs.org.

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.

Sponsorship Committee:

A Chairman is needed.

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

South Louisiana and Offshore Gulf of Mexico Exploration and Production Activities

LAFAYETTE DISTRICT, ONSHORE AREA By Carlo C. Christina

The GCAGS Convention, held here in New Orleans last month, was pronounced a great success, thanks to General Chairman Art Johnson, GCAGS President Tom Klekamp, and the efforts of many members of the convention team.

My personal highlight was the All-Convention luncheon, where John Dribus presented a review of many excellent giant oil discoveries in conventional reservoirs, in deep waters around the world. I now feel very confident there will be no worldwide shortage of oil in the near future.

Preceding John's presentation an award was presented to James Robert "Jim Bob" Moffett, citing him as the "Ultimate Wildcatter." Bob Douglass presented the award on behalf of the New Orleans Geological Society, where Jim Bob served as a member and long-time supporter. We are proud to call him one of our own.

Jim Bob received his M.S. degree in geology from Tulane University in 1963 and worked in New Orleans as a consulting geologist. In 1969 he and two associates founded McMoRan Oil & Gas Co. which has become one of the world's leading natural resource companies.

The Office of Conservation, Lafayette District, Onshore and Offshore Areas, issued 29 permits to drill during the month of September. Drilling activity during the month was curtailed because of the threat of Tropical Storm Karen.

NEW LOCATIONS

In Ascension Parish, in **Laurel Ridge Field**, (A), Anglo-American is drilling below 11,775 feet to test the Marg tex-Bol mex sections at 15,300 feet. The #1 Chatham Farms is located in Sec. 64, 10S-14E, 1¹/₂ miles northeast of Miogyp production at 12,400 feet. Two wells have produced more than 237,000 barrels of oil and 280 million cubic feet of gas in the past 4 years. (246963)

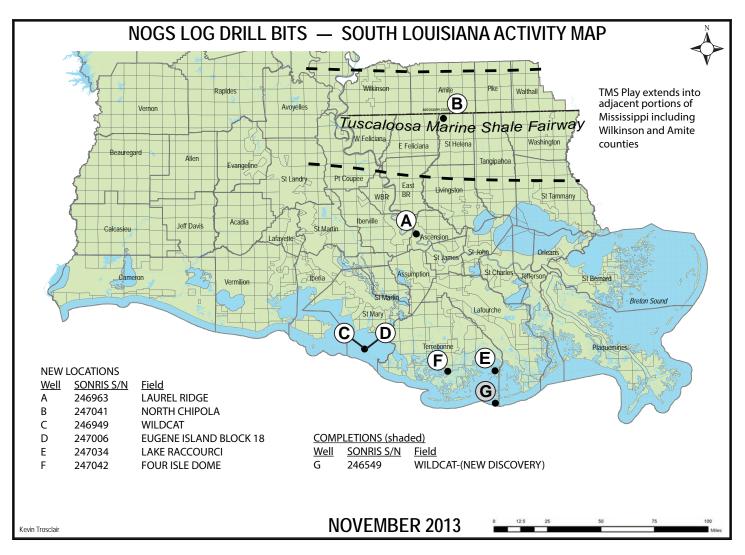
Goodrich Petroleum has staked a location for an important horizontal Tuscaloosa Marine Shale test in **North Chipola Field**, (B), in St. Helena Parish. The #1 Weyerhaeuser 51 H is located in Sec. 51, 1S-4E, 3 miles southeast of excellent Tuscaloosa Sand production at 12,800 feet. The well will be drilled in a horizontal leg of 6,500 feet, to 19,500 feet, or to a true vertical depth of 13,230 feet. (247041)

The Tuscaloosa Marine Shale play is back in the news. On the positive side, Goodrich Petroleum has announced that 3 TMS wells have produced an average of 1,120 barrels of oil equivalent per day. Goodrich has recently bought 120,000 net acres from Devon Energy for \$26 million, and now owns more than 320,000 net acres in the trend.

On the negative side, the average cost of these wells is \$13 million, whereas the cost must be reduced to \$10 million for the play to be profitable. Is \$100 oil here to stay?

Latest Tuscaloosa Marine Shale news:

Goodrich Petroleum announced that its 2014 capital budget of \$375 million includes \$300 million in the Tuscaloosa Marine Shale, an increase from \$75 million, and will have 5 horizontal rigs running in the play by the end of 2014.



Castex Energy will drill a **wildcat**, (C), in St. Mary Parish to test Cibicides carstensi sands at 11,500 feet. The #1 SL 21122 is located in the Atchafalaya Bay, 3 miles north of Castex's excellent Cib carstensi production in Eugene Island Block 18 Field. Two wells have produced more than 675,000 barrels of oil in 2 years. (246949)

Castex Energy has also permitted the #1 SL 21120, located in **Eugene Island Block 18 Field**, (D), in St. Mary Parish. It will be drilled to test the Cib carstensi sands at 11,500 feet which are productive, as noted above. (247006)

In Terrebonne Parish, Hilcorp Energy will drill its #1 SL 21149 in **Lake Raccourci Field**, (E), to a projected depth of 18,000 feet in Sec. 27, 21S-20E. It is located $3\frac{1}{2}$ miles southwest of Hilcorp's excellent production in the #1 SL 20892, which has produced more than 112,700 barrels of oil and 2.1 billion cubic feet of gas in $\frac{4\frac{1}{2}}{2}$ months. (247034)

Also in Terrebonne Parish, Hilcorp Energy will drill the #1 LL&E in **Four Isle Dome Field**, (F), in Sec. 28, 21S-16E, located on the extreme southwest flank of the field, 2 miles west of an old shallow producing oil well. The well will be drilled to a depth of 17,400 feet. If productive, it will certainly open a new area for development. (247042).

COMPLETIONS

Contango Operators has completed its #1 SL 21096 as a **gas discovery**, (G), in South Timbalier Block 17. The well was completed in the Cyclam 4 Sand flowing 11,103 MCFD and 132 BDPD through perforations 11,174 to 11,200 feet. As reported in the August Drill Bits, this well was a rank wildcat, located several miles south of the nearest production in Caillou Island Field. (246549)

OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES

by Al Baker

During September 2013, the BOEM approved **79** Gulf of Mexico drilling permits. Of these, **32** were for shelf wells, and **47** were for deepwater wells. There were **5 shelf** (2 exploratory and 3 development) and **8 deepwater** (1 exploratory and 7 development) **new well permits** issued.

On the shelf, exploratory new well permits were given to **Walter Oil & Gas** for their **South Marsh Island 277** #1 well and to **Dynamic Offshore Resources** for their **South Marsh Island 41** #16 well. The development well permits were given to three operators. **Arena Offshore** received a new well permit for their **Eugene Island 338** #K-9 well. **Tana Exploration** was awarded a new well permit for their **West Delta 59** #3 well, and **Energy XXI** was granted a permit for their **Main Pass 61** #C-11 well.

In deepwater, permitting activity was done by four operators. **BP Exploration & Production** was granted permits for 5 development wells off their **Mad Dog** spar platform, the **Green Canyon 782 #MD-12** and **#MD-15** through **#MD-18** wells. **BHP Billiton** received a new well permit to drill their **Green Canyon #SH-102** development well. **Shell** also obtained a permit for their **Mississippi Canyon 934 #A-8** development well. Lastly, **Marathon** was awarded a permit for their **Desoto Canyon 757 #1** exploration well.

On September 27th, IHS-Petrodata reported that the Gulf of Mexico mobile offshore rig supply totaled **106**. The marketed rig supply was comprised of **80** rigs, of which **76** were under contract. The contracted versus total rig supply utilization rate is **71.7%**, and the marketed contracted versus marketed supply utilization rate stands at **95.0%**. The total rig supply is **1** less than reported last month, whereas the number of contracted rigs remained the same. This compares to 77 out of the 109 rigs available during the same period in 2012 for a 70.6% fleet utilization rate.

On September 27th, the BakerHughes Rig Counts indicated that there were **63** active mobile offshore rigs in the Gulf. The total number is the same as reported last month. There were **50** rigs in offshore Louisiana, **9** rigs in offshore Texas, and **2** rigs in offshore Florida. The current active rig count compares to 50 active rigs during the same period last year representing a **26.0%** increase in yearly activity.

On September 11th, **LLOG Exploration** announced a discovery at its ultra-deepwater **Taggart Prospect** on **Mississippi Canyon Block 816.** A press release by their partner, **Stone Energy**, indicated that the **#1** well found 90 feet of net oil and gas condensate pay in 2 sands within the Upper Miocene and Pliocene sections. The well was drilled to a total depth of 11,820 feet in a water depth of 5,530 feet. A plan to tie-back the well to an existing facility is currently being formulated.

Stone Energy also reported a discovery on its **Taildancer Prospect** in **Ship Shoal Block 113.** The well encountered 130 feet of net oil and gas pay. Start-up of production from this discovery is forecast to occur during the fourth quarter of 2013.

On September 12th, **Noble Energy** made its second discovery within the company's ultra-deepwater **Rio Grande** exploration area. The **Troubadour Prospect** discovery was drilled in 7,285 feet of water on **Mississippi Canyon Block 699**, where their **#1** well reached a total depth of 19,510 feet. The well found approximately 50 feet of natural gas pay in a high quality, Miocene sand. **Troubadour** is east of and adjacent to Noble's **Big Bend** discovery on **Mississippi Canyon Block 698**. Approximately 150 feet of net oil pay in two, high quality, Miocene reservoirs was encountered in the Big Bend **#1** well, which was drilled in fourth quarter of 2012.

On September 12th, the **BOEM** published the results of its **Phase I** evaluation of the bids received at **OCS Sale 233**, on August 28, 2013, in New Orleans. Only **1** bid was deemed acceptable out of the **61** bids on **53 blocks** submitted by **12 companies** at the lease sale. The remaining 60 bids now fall into the **Phase 2** evaluation period. The BOEM has 90-days following the sale date to either accept or reject the high bids.

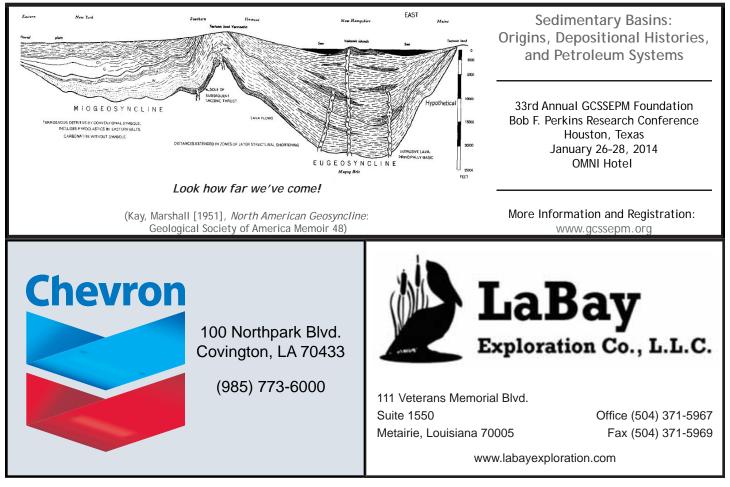
CS News...

NOGS 2012-13 BEST PAPER AWARD

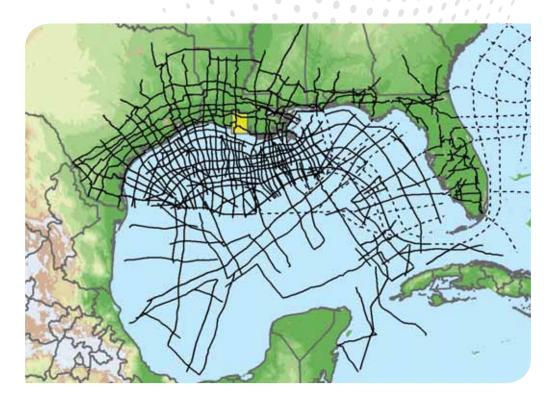
At the November 11th NOGS Luncheon, Ricky Boehme, Staff Geologist with Chevron in Houston, Texas, will be presented with the Best Paper Award for the 2012-13 year.

Ricky was the speaker at the December 3, 2012, luncheon in which he presented "Big Foot Geology and Development Plan Overview."





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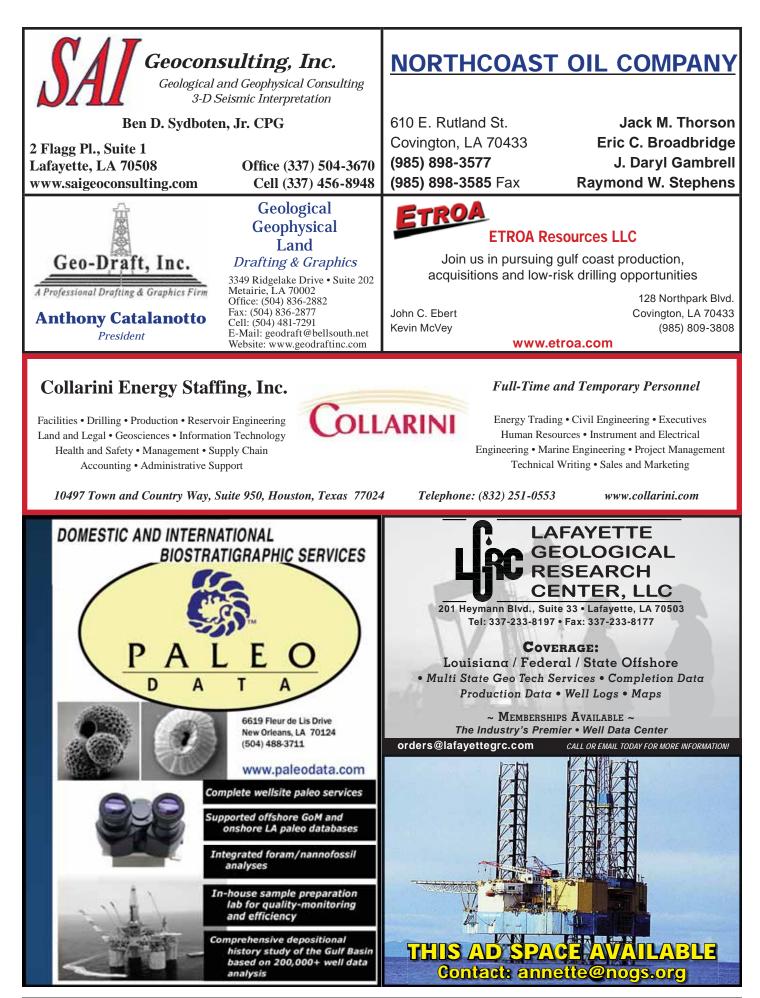
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INFOTIDBITS

Submitted by Sheri Richardson

Reuters – Dmitry Zhdannikov

"U.S. Soon to Overtake Russia as Top Oil Producer." October 11, 2013 6:04 EDT

http://www.reuters.com/article/2013/10/11/us-oil-iea-idUSBRE99A08N20131011

The United States will become the world's largest oil producer next year - overtaking Russia - thanks to its shale oil boom which has transformed the global energy landscape, the West's energy watchdog said on Friday.

The prediction comes only days after estimates by the U.S. government showed the United States, the world's largest oil consumer, has ceded its ranking as top global oil importer to China, thanks to the shale revolution cutting import needs.

"The United States' place in the driver's seat of growth is also a throwback to decades past," the International Energy Agency said in its monthly report.

Major producers such as Russia are now forced to invest billions of dollars into new pipelines towards Asia as they can no longer rely on demand from the West, and have to deal with increasingly assertive Beijing.

"With output of more than 10 million barrels per day for the last two quarters, its highest in decades, the nation is set to become the largest non-OPEC liquids producer by the second quarter of 2014, overtaking Russia. And that's not even counting biofuels and refinery gains," the IEA said.

The spike in U.S. production will allow total non-OPEC supply to grow by an average of 1.7 million barrels per day in 2014, peaking at 1.9 million in the second quarter, the highest annual growth since the 1970s, the IEA said.

That robust growth will compensate for disruptions to Organization of the Petroleum Exporting Countries' production and provides a cushion for oil prices, which otherwise could have spiked much higher than the current \$110 a barrel.

OPEC crude supplies slipped to below 30 million bpd for the first time in almost two years, led by steep drops in Libyan and Iraqi exports due to unrest and terminal repairs, and despite Saudi Arabian output topping 10 million bpd for a third month running.

The IEA said that growth in non-OPEC production was so strong that it further reduced its estimates for demand for OPEC crude next year by an average of 100,000 bpd to 29 million bpd - effectively 1 million bpd below current pumping levels.

The Independent – Neela Debnath

"Nasa releases images of new island formed in Pakistan earthquake." September 30, 2013

http://www.independent.co.uk/news/world/asia/nasa-releases-images-of-new-island-formed-in-pakistan-earthquake-8849087.html

The new outcropping off the shore of the Paddi Zirr near Gwadar has been captured by Nasa's Earth Observing-1 satellite. The island rose from the depths of the sea floor after the earthquake hit, it is estimated to be about 75 to 90 metres in diameter and 15 to 20 metres above the waterline.

It is believed that a shallow pocket of pressurised gas was released during the earthquake, the gas rose to the surface, taking mud and rock with it.

According to a group of people visiting the island, the sound of hissing gas was heard escaping from fissures even though there was no smell. The group found dead fish and other sea creatures on the surface of the island that had been carried up with the mud and clay.

Experts believe that this will only be a temporary island and that once the gas has escaped the mud will collapse and re-settle. Storms and waves are likely to play a part in shortening the lifespan of the island by washing away the soft clay and sand. It is thought that islands such as these only last a few months before sinking below the water again.

The devastating earthquake struck the Baluchistan province on Tuesday afternoon at a depth of 20km, with a magnitude of 7.7. Over 300 people have been killed and more than 700 have been injured. The Southwestern region of Pakistan has been hit by aftershocks which have left at least 15 people dead.

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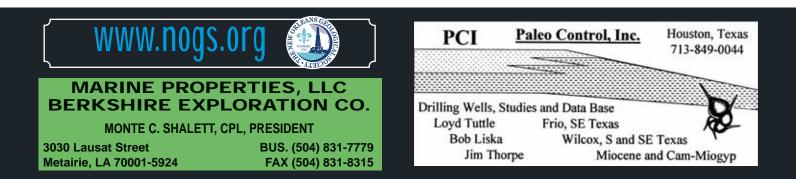


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