





Published monthly by the New Orleans Geological Society. This issue was sent to press on Dec. 28, 2017.

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

Vermillion Cliffs National Monument — Arizona

#### IN THIS ISSUE

#### on the cover

#### Cover photo from the Bureau of Land Management

#### This month cover photo comes from the Bureau of Land Management and features the Vermillion Cliffs of Arizona. The 280,000 acre monument is located on the Colorado Plateau and makes up part of the Grand Staircase supersequence of sedimentary rocks that can be seen in exposures across nearby areas like the Grand Canyon. Consisting of silt and sandstone with some carbonates, the Vermillion cliffs gain their name thanks to coloration from iron oxide and manganese. The parks serves as a home to fauna like mountain lions, bighorn sheep, birds of prey, and even the California condor. Between 165 to 200 million years old, the stratigraphic rocks of these cliffs are relatively young compared other geologic sites across the United States, but their historic settlements, lack of spoilage, and striking color and prominence make them one of the quintessential sites of the American West.

#### **Regular Features:**

On the Cover	3
From the Editor	3
From the President	4
NOGS Officers / Contacts	6
Upcoming Events & Activities	7
NOGS Luncheon Presentation	8
Calendar of Events: January - February	10
NOGA News	12
Drill Bits	16
NOGS Memorial Foundation & FONO Fund	25

#### **Special Features:**

John Curtis Science Fair Winners	2
Best Presentation Award	5
New 2017 Ad Rates!	5
NOGS Christmas Holiday Party Photo Collage	14
AGU Fall Meeting	18
Girl Scouts B.I.G. Event	19
Girl Scouts B.I.G. Photo Collage	20
PHI Call for Papers	22
AAG Annual Meeting	27

## From the Editor

Around this time last year, I remember joking with some friends that at least 2017 couldn't be any harder than 2016, so we didn't have anything to worry about. Time proved me wrong (at least partially) on that count. To paraphrase Queen Elizabeth II, this past year was not one that I will look back on with undiluted pleasure. Whether you were one of the many geologists in the job hunt, resisted the urge to throw a rock hammer at a TV during a news broadcast, or were just generally downhearted at the seemingly unending barrage of reports on painful events across the world, I think we all had our share of frustrations with the past twelve months. I'm not naïve enough to think that the matters of the world will suddenly take on a rosier tone with the advent of another new year, but I maintain my hope and expectation that the challenges of the coming months will be tempered by support networks like the one found within NOGS. A support network that I have come to respect and rely on as a vital part of my professional journey.





FROM THE
PRESIDENT
CHRIS MCLINDON

At 2:00 on the morning of April 12, 1943, a fault ruptured the surface of the earth at a sugarcane plantation along the west bank of the Mississippi River near Vacherie, Louisiana. Given that it was spring, the river was at medium flood stage, and the north end of the fault was only about three-tenths of a mile from the levee, the New Orleans District of the Corps of Engineers dispatched Harold Fisk to investigate. He found that the surface rupture was comprised of a series of parallel open cracks arranged in an en echelon pattern. Together they were over a mile long on an orientation of about 30 degrees west of north, and the western side of the fault was down-dropped relative to the eastern side. There was a maximum displacement of about eight inches near the center of the fault trace.

This episode brought together three seemingly disparate timeframes of geological history. The movement of the fault was an instantaneous geological event. In many ways this put it in the same category with episodes of fault movement that are associated with earthquakes, but no seismic activity was detected at the Loyola University seismography station, only 50 miles away. This would tend to suggest that movement experienced at the surface was not directly associated with deep tectonic movement. It was something different, and understanding the processes that caused a rupture in the earth's surface so close to the river may prove to be one of the more important areas of geological investigation that we are presented with today.

Fisk found that the surface rupture was also directly associated with a set of historical crevasses of the river that have occurred over a period of several centuries. The surface trace is nearly coincident with a historical distributary channel of the river whose natural levees form a topographic ridge that extends perpendicularly from the river into Lac Des Allemands. The relatively complex channel network of this crevasse feature suggests that it has been active a few times in the

past. The Corps sent a drilling rig to the site to collect a set borings across the fault displacement. Fisk's interpretation of a subsurface profile constructed from these borings showed that there was displacement of the strata throughout the Holocene epoch. The pattern of offset of these strata, and the fact that the offset of Pleistocene surface was about three feet at a depth of about 40 feet below the surface, suggests that the April 12 rupture was the latest in a series of episodic of fault movements. The coincidence of the fault with the main channel of the crevasse system indicates that previous episodes of fault movement may have caused crevasses of the river.

The longest of the three timeframes associated with the fault rupture is evidenced on Exhibit 3 of Docket No. 93-445 at the Geological Oil and Gas Division of the Louisiana Office of Conservation. A fault plane map submitted as evidence in a unitization proposal filed at Vacherie Field shows the contours of a fault that has over 500 feet of displacement at a depth of about 6,000 feet. The orientation of the fault plane contours suggest that they can be extrapolated to a surface coincidence with the 8 inches of offset that occurred instantaneously on April 12. This coincidence would mean that the fault has been moving episodically on the flanks of the Vacherie Salt Dome for about 20 million years.

Most people tend to think of geological processes in terms of things that happened over long periods of time in the distant past. It is not until the occurrence of an instantaneous event that we consider the implications of geology in the here and now. The importance of the Vacherie fault rupture is that it shows that studying geological processes in the distant past is the best way to predict the occurrence of instantaneous (and potentially catastrophic) events in the future. The Vacherie fault has been mapped as a part of the oil and gas industry knowledge base. That same knowledge base has the potential to map the locations of other faults along the river that extend to the surface and are coincident with the sites of historical crevasses. It appears likely that crevasses at Donaldsonville, Edgard, Killona, Sauve, Caenarvon, Fort St. Phillip, and the Jump near Venice may be associated with such faults. These are all areas that should be categorized as having higher probabilities for future events. The shortest and most effective route to fully investigate these areas will be through the cooperative engagement of the oil and gas industry with state and federal agencies that are responsible for the integrity of the river levee system.

Chris McLindon



#### **BEST PAPER AWARD**

On December 11, NOGS President-Elect Alex Janevski presented the award for 2017 Best Paper Award to Dr. Terry Wallace, Principal Associate Director for Global Security at Los Alamos National Laboratory, for his outstanding contribution to the NOGS luncheon series.

NOGS had the pleasure of inviting Dr. Wallace to lunch at the famous Bywater restaurant, The Joint, to receive his award after a technical session at the AGU conference held at the New Orleans Ernest N. Morial Convention Center.





2015 Rates

## 2018 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.

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

Outside Back Cover .....+40%

9 9		
AD SIZE	2015 RATE	<b>NEW 2018 RATE!</b>
Full Page (7.5"x10")	\$3500	\$1750
Half Page (3.75"x10" or 7.5"x5"	\$1850	<b>\$925</b>
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 L	OCATIONS
Ins	ide Front Cover	+30%



#### **NOGS Office**

Office Manager: Annette Hudson
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.

$\mathcal{I}\mathcal{N}$	BOARD OF DIRECT	ORS	Company		Phone	E-mail	
' 🖙	President	Chris McLindon	Upstream Exploration L	LC	504-756-2003	chris.mclindon@	Upstreamexp.com
	Vice President	Robert Rooney	Robert M. Rooney Inc.		504-460-0319	robmrooney@a	ol.com
W	Secretary	Grant Black	Chevron		985-773-6882	gblack@chevro	
VV	Treasurer	Margaret McKinney	TGS		504-524-3450	margaret.mckin	
	President-Elect	G. Alex Janevski	Shell		504-425-6214	gregory.janevsk	
	Editor	Laura Sorey	EarthCon Consultants		601-421-3352	lc.sorey@gmail	
	Director 2018	Brenda Reilly			504-430-4240	brendaereilly@l	
ID)	Director 2019	Jennifer Connolly	Shell		504-425-6411	jennifer.connoll	
	Director 2020	David Reiter	Stone Energy		504-593-3623	reiterde@stonee	energy.com
n							
L E A	COMMITTEE	Chairperson					
	AAPG Delegates	William M. Whiting	Consultant		504-947-8495	bootscon@aol.c	om
	AAPG Student Chapter	Sam B. Shrull	LSU		281-705-3254	sshrul2@lsu.edu	1
Δ	AAPG Student Chapter	Tushar Bishnoi	Tulane University			tbishnoi@tulane	e.edu
	AAPG Student Chapter	Joshua Flathers	UNO		504-952-6437	jrflathe@uno.ed	u
N	Advertising-Log	TBD					
	Auditing	Al Melillo	Retired - Chevron		504-491-0683	allanmelillo@bo	ellsouth.net
S	Awards	Michael N. Fein			504-717-6465	1feinmn1@cox.	net
	Ballot	Margaret McKinney	TGS		504-524-3450	margaret.mckin	ney@tgs.com
	Best Paper	Bay Salmeron	Chevron		832-854-6431	bay.salmeron@	chevron.com
G	Entertainment	G. Alex Janevski	Shell		504-425-6214	gregory.janevsk	i@shell.com
	Environmental	TBD					
日日	External Affairs	TBD					
E	Finance and Investment	Margaret McKinney	TGS		504-524-3450	margaret.mckin	
	Historical	Edward B. Picou, Jr.	Consultant		504-529-5155	epicou@bellsou	th.net
L O	Membership/Directory	TBD					
مِل	New Geoscientists (NGNO)	Rachel Carter			913-710-8021	r_carter@me.co	m
	Nominating	J. David Cope	Rising Natural Resource	es LLC	504-214-6754	greatmre@aol.c	
	Non-Technical Education	Duncan Goldthwaite	Consultant		504-887-4377	DGldthwt@aol.	
G	Office Operations	Al Melillo	Retired - Chevron		504-491-0683	allanmelillo@b	
	Publications Sales	Edward B. Picou, Jr.	Consultant		504-529-5155	epicou@bellsou	
	School Outreach	Thomas C. Bergeon	Upstream Exploration		504-832-3772	tom.bergeon@u	pstreamexp.com
	Special Projects	TBD					
C							
	NOGS LOG STAFF						
A	Editor	Laura Sorey	EarthCon Consultants		601-421-3352	nogseditor@gm	ail.com
	Editor-Elect	TBD					
مِل	Auxiliary	NOGA Officers and Directors	NOGA				
	Drill Bits	Al Baker	Beacon Exploration, LL		504-836-2710	ABaker1006@a	
$\sim$	Drill Bits	Carlo C. Christina	Retired (C & R Expl. Inc	c.)		carlocc398@ao	
$\supset$	Drill Bits	Kevin Trosclair	BOEM		504-202-7997	kevintrosclair@	•
	Staff Photographer	Arthur Christensen	Shalimar Consulting		985-893-2013	arthur_shalimar	
	Layout / Printing	Kristee Brown	Creative Graphics & Pri	nting, LLC	985-626-5223	kpbrown@bells	outh.net
C)	Webmaster	Charles Miller	OCSBBS Website				
S O C I	NOGS AUXILIARY						
	Officers		Phone	Directors		Year	Phone
' <del> </del>	President	Margie Conatser	504-469-2496	Linda Pierc		2016-18	504-393-7365
E	Vice-President	Camille Yeldell	504-835-7467	Genny Mel		2016-18	985-725-1553
T	Secretary	Trez Marie Zotkiewicz	504-831-3023	Penny Brya		2017-19	504-831-7744
	Treasurer	Judy Lemarié	504-393-8659	Loretto Step	phens	2017-19	504-451-3472
Y	Parliamentarian	Alma Dunlap	504-737-2678				
	Member-at-Large	Trudy Corona	504-737-6101				



### January 8 • NOGS Luncheon



#### **Holiday Inn Downtown Superdome**

\$3.00 validated parking in hotel garage

#### Presentation:

#### Myths and Misunderstandings of Reservoir Engineering

#### Guest Speaker:

#### Dwayne Purvis, P.E.

Dwayne Purvis, P.E. • New Orleans, Louisiana See page 8 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

#### February 5

#### Joint NOGS/SGS Luncheon

Holiday Inn Downtown Superdome • New Orleans, Louisiana For more info: annette@nogs.org or 504-561-8980

#### February 21

#### New Orleans Geological Auxilliary (NOGA) Luncheon

Walnut Room, Lakefront Airport • New Orleans, Louisiana Invitation Only - Spouses and Guests Welcomed

#### February 5-9

#### NAPE Summet Week 2018

George R. Brown Convention Center • Houston, Texas For more info: http://napeexpo.com/summit

#### February 20 SIPES Luncheon

Andrea's • Metairie, Louisiana For more info: Carol St. Germain, 504-267-3466

#### NOGS CONTACT LIST

Continued from previous page

#### **MEMORIAL FOUNDATION**

BUAKD OF TRUSTEES		Company	rnone	E-man
2017-2018 Chairman	Al Melillo	Retired - Chevron	504-491-0683	allanmelillo@bellsouth.net
2017-2018 Secretary	Chris McLindon	Upstream Exploration LLC	504-756-2003	chris.mclindon@upstream.com
2017-2018 Trustee	Chuck Holman		504-975-6735	charleswholman@bellsouth.net
2017-2018 Trustee	Al Baker	Beacon Exploration, LLC	504-836-2710	abaker1006@aol.com
2018-2019 Trustee	Kelli Hardesty	ERM	504-846-9245	kelli.hardesty@erm.com
2018-2019 Trustee	William M. Whiting	Consultant	504-947-8495	bootscon@aol.com
2019-2020 Trustee	David E. Reiter	Stone Energy Corporation	504-593-3623	reiterde@stoneenergy.com
2019-2020 Trustee	TBD			

#### **AAPG DELEGATES**

_	_	_
Term	En	de

Term Ends				
2018	Earl Cumming	Reservoir Frameworks LLC	985-630-6898	earlcumming@bellsouth.net
2018	William M. Whiting	Consultant	504-947-8495	bootscon@aol.com
2018(a)	Dave Balcer			balcer@bellsouth.net
2020	Elizabeth McDade			elizabeth_mcdade@fmi.com
2020(a)	G. Alex Janevski	Shell	504-425-6214	gregory.janevski@shell.com



#### Jan 8 NOGS Luncheon Presentation



☆ ☆ ☆ at the Holiday Inn Superdome ☆ ☆ ☆

## Myths and Misunderstandings of Reservoir Engineering

Presented by

#### **Dwayne Purvis, P.E.**

Dwayne Purvis, P.E. New Orleans, Louisiana

#### **ABSTRACT**

Armed with a better fundamental understanding of reservoir dynamics, engineers and the geologists who work with them are better able to interpret and predict future behaviors.

This presentation takes aim at some of the most common and intransigent engineering fallacies - even among reservoir engineers. The wide-ranging discussion addresses concepts like drainage area maps, the concepts of depletion and interference and how they differ between millidarcy and nanodarcy reservoirs. It detours into tilted oil-water contacts before returning to the concepts of transient and boundary-dominated flow, the use of a constant b-factor, the utility of daily production data and how those relate to reserves categories.

#### **BIOGRAPHY**

**Dwayne Purvis, P.E.** has spent over two decades in reservoir engineering and executive leadership as a consultant and operator. He has led or participated in hundreds of field



studies and reserve analyses over dozens of basins in the United States and abroad. He has also participated in the sale or acquisition of projects valued from tens of thousands to billions of dollars. Before starting

his own consulting practice in 2015, he served Jetta Operating Company as Reservoir Engineering Manager and Reserves Manager. Prior roles include founder and Executive Vice President of the consulting firm The Strickland Group, and partner at Cawley, Gillespie & Associates. Mr. Purvis has published on issues of reserves, risk analysis and shale reservoirs. He is a registered professional engineer in the state of Texas, member of SPEE, AAPG, SEG and a 25-year member of SPE.

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

THE JANUARY LUNCHEON RESERVATION DEADLINE IS JAN. 5. CONTACT THE NOGS OFFICE

The next luncheon will be the Joint NOGS/SGS Luncheon held on February 5. Our guest speakers will be Michael Murat and Trevor Bollmann of Chevron. Contact the NOGS office at 504-561-8980 or use the PayPal link at www.nogs.org to make your reservation.



### 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







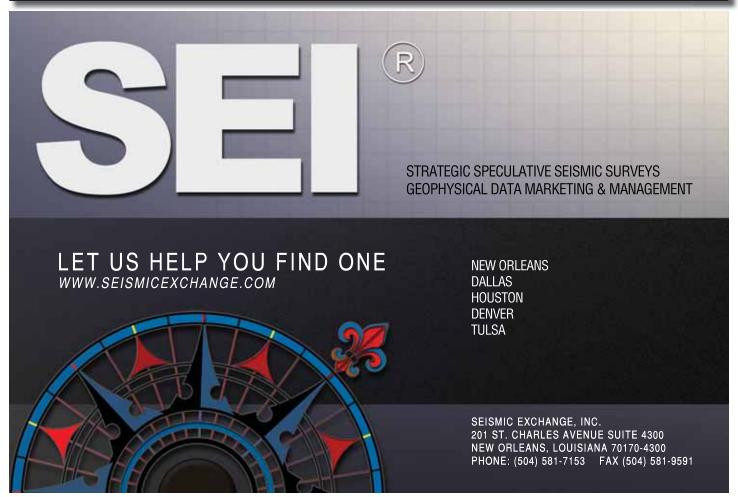
Serving the Oil and Gas Industry for Over 60 Years



## CALENDAR OF EVENTS: JANUARY - FEBRUARY 2018

If you know of upcoming seminars or academic events that may be of interest to our members, please email the event details to Laura Sorey at nogseditor@gmail.com to be included in the monthly calendar.

2018	EVENT	LOCATION	CONTACT / INFO
1 Jan	New Years Day		
1 Jan	Registration Open 12th Annual Louisiana Water Conference	LSU Baton Rouge	http://lwrri.lsu.edu/lawater-2017/
8 Jan	NOGS Luncheon Presentation Speaker: Dwayne Purvis, P.E. "Myths and Misunderstandings of Petroleum Engineering"	Holiday Inn Superdome	annette@nogs.org or 504-561-8980
15 Jan	Martin Luther King, Jr. Day		
16 Jan	SIPES Luncheon	Andrea's - Metairie	Carol St. Germain, 504-561-8980
5 Feb	Joint NOGS/SGS Luncheon Presentation Speakers: Michael Murat and Trevor Bollmann Chevron	Holiday Inn Superdome	annette@nogs.org or 504-561-8980
5-9 Feb	NAPE Summit Week	George R Brown Convention Center Houston, Texas	http://napeexpo.com/summit
13 Feb	Mardi Gras		
20 Feb	SIPES Luncheon	Andrea's - Metairie	Carol St. Germain, 504-561-8980





#### 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."

#### **NOGA and the NOGS Christmas Holiday Party**

The wintery weather on December 9 really had everyone in a holiday mood for the NOGS Christmas Holiday Party. Candles on the steps added to the lighting the entrance to the lovely home of Penny and Jack Bryant. Everyone enjoyed the evening, and there was lots of talk about the snow that fell in south Louisiana and even a little in New Orleans on the day before. The dining room table held an abundance of hearty appetizers, pork tenderloin, shrimp and grits, while drinks and assorted desserts were available in the kitchen area. Martin Wine Cellar was the caterer. Auxiliary members Camille Yeldell and Alma Dunlap chaired the night for NOGS, and Penny and Jack were most gracious hosts. Thanks to all!

The Auxiliary will meet next on February 21, for lunch in the Walnut Room at the Lakefront Airport. Spouses and guests are always included in this event. We are hoping to have David Hammer, Investigative Reporter for WWL-TV, as our speaker. Invitations will be in the mail shortly. We look forward to seeing everyone there.

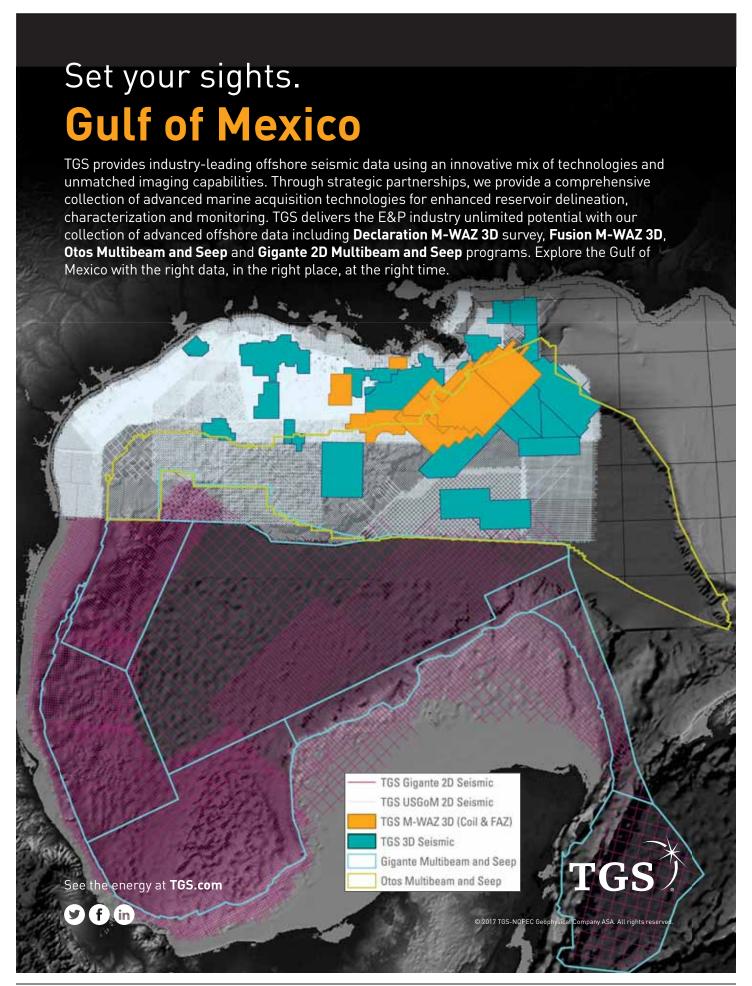




#### **New Orleans Geological Auxiliary Membership Application**

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





## stmas Holiday Party























PHOTOGRAPHY BY TOM BERGEON

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

LAFAYETTE DISTRICT, ONSHORE AREA By Carlo C. Christina and Kevin J. Trosclair

The Baker-Hughes United States rig count for the month of November averaged 910 rigs, down 30 rigs from the prior month's average. The Louisiana rig count (not including the OCS) averaged 43 rigs for the month of November.

North Louisiana Rigs:	39
South Louisiana Rigs:	
Land	3
Inland Waters	1

During the month of November the Louisiana Department of Conservation issued 12 permits to drill for oil and gas in the Lafayette District, of which, many were relatively shallow or in-field development wells. Following are the wells of interest:

#### **NEW LOCATIONS**

In Beauregard Parish, **North Skinner Lakes Field, (A),** Firstrike Energy is drilling below 1400 feet in the #1 Columbia Land and Timber. The well will test the Cockfield section at a depth of 8,000 feet. It is located in Sec. 33, 5S-13W, approximately 1 mile north of production in the Upper Wilcox sands. (SN 250642)

In Pointe Coupee Parish, Fordoche Field, (B), Cypress Operating will drill the #1 Cynthia Beauvais in Sec. 119, 6S-9E, to a depth of 9900 feet to test Cockfield sands in the area. The well is located approximately 1 mile east of an oil well which has been producing more than 26 years. North Central Oil drilled and completed the #1 Picard through perforations 9838 to 9855 in 1991 flowing 168 BOPD. It was placed on production at that time, and has continued to produce every month since then, with cumulative production of 249,642 barrels of oil. Most importantly, the electric log indicates a sand having less than 8 feet of pay. Cockfield sands are unpredictable that way. (SN 250647)

PIE Operating will drill the #1 Mineral Resources G on the northwest flank of **Neale** Field, (C), Beauregard Parish. It will be drilled to a total depth of 10,800 feet in Sec. 29, 3S-11W. (SN 250629)

Also in Beauregard Parish, **West Cowpen Creek Field**, **(D)**. BHP Billiton has permitted the #1 WX A RA SUC; MINERAL in Sec. 21, 6S-10W, to test Wilcox sands at 11,550

feet. The well is located approximately 1 mile west of recent production in the field. (SN 250654)

#### **COMPLETIONS**

Hilcorp Energy has completed its #1 Sweet Lake Land as a gas well in **Chalkley Field**, (**E**), Cameron Parish, flowing 2173 MCFD and 192 BCPD, through perforations 12,932 to 12,998 feet. The well was drilled to a total depth of 13,260 feet in Sec 14, 12S-7W. (SN 250396)

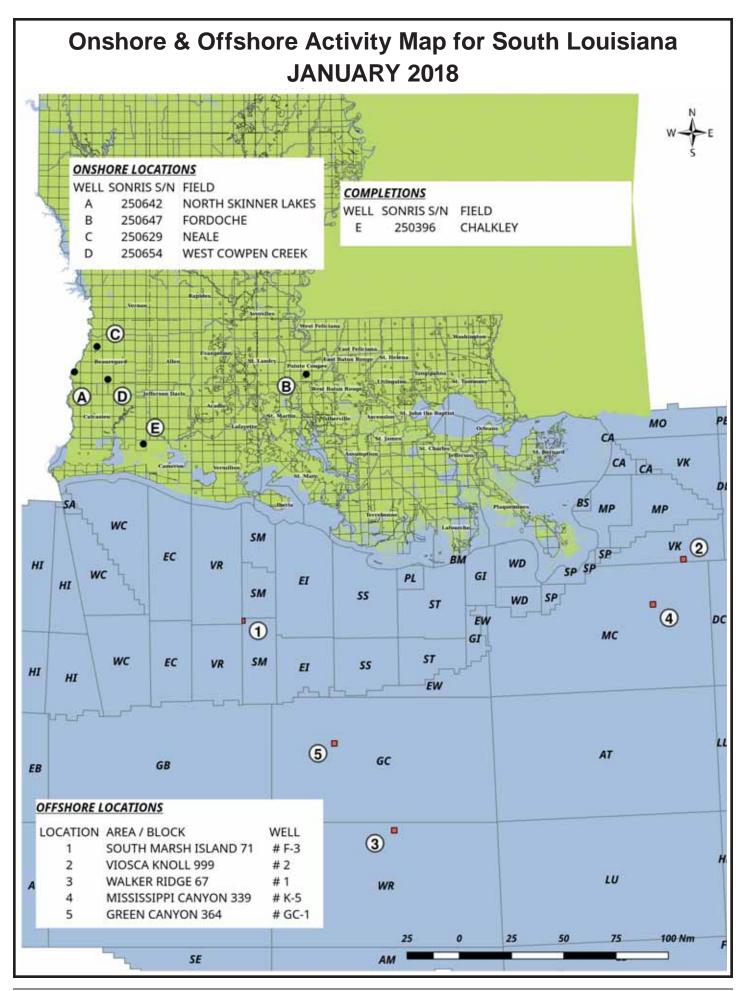
## OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES

by Al Baker

During **November 2017**, the **BOEM** approved **76** Gulf of Mexico drilling permits. **Twenty** of these were for shelf wells, and **56** were for deepwater wells. Of the total number of permits, there were **5 new well permits**, **1** on the shelf and **4** in deepwater.

The single shelf new well permit was for the Byron Energy, South Marsh Island 71 #F-3 development well.

The four deepwater new well permits were for exploration wells. LLOG Exploration Offshore received two permits for their Viosca Knoll 999 #2 and Walker Ridge 67 #1 wells. BP Exploration & Production received one permit for their



Mississippi Canyon 339 #K-5 well, and ExxonMobil obtained a permit for their Green Canyon 364 #GC-1 well.

On November 22nd, **IHS-Petrodata** reported that the Gulf of Mexico mobile offshore rig supply stood at **94**, which is the **same** as last month. The marketed rig supply consisted of **53** rigs, of which **35** were under contract. The marketed rig supply number remained the same, while the contracted rig supply number decreased by **1** compared to the previous month. The marketed contracted versus total rig supply utilization rate stands at **37.2%**, and the marketed contracted versus marketed supply utilization rate stands at **66%**. By comparison, the November 2016 total fleet utilization rate stood at 46.2% (versus 56.4% today) with 48 out of the 104 rigs under contract.

As of November 22nd, **BakerHughes** indicated that there were **22** active mobile offshore rigs in the Gulf of Mexico, which is **62.9%** of the rigs under contract mentioned above. This active rigs number is **2** greater than reported last month. Of the 22 rigs, **4** are located

on the **shelf**, and **18** are situated in **deepwater**. At the same time last year, there were 23 mobile offshore rigs operating in the Gulf of Mexico.

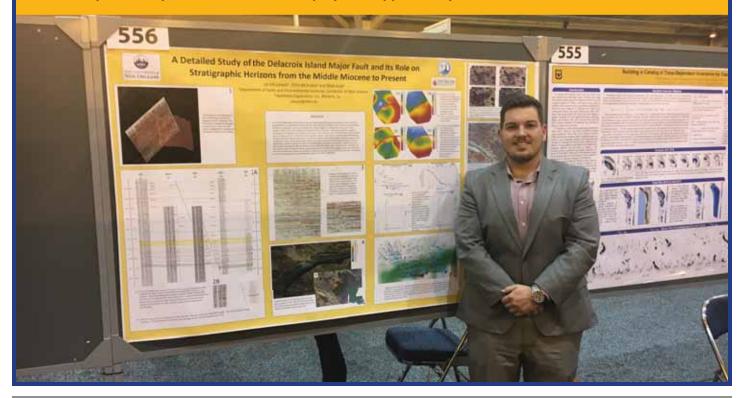
As of November 22nd, the **BakerHughes** total U.S. rig count stood at **923** rigs, which is **24 more** rigs than at the end of October. Of the 923 rigs, **747** (**80.9%**) are oil rigs and **176** (**19.1%**) are gas rigs. A year ago, there were 593 rigs working in the U.S. Thus, the current rig figure represents a **55.6%** increase year over year. Texas still has the largest number of rigs with 450, which is slightly less than half (48.8%) of the total number of rigs in the U.S.

On November 29th, the **BOEM** issued the **final results** for bids submitted in March 2017 at **OCS Sale 249.** A total of **83** bids were deemed acceptable and **7** bids were rejected as insufficient. All of the rejected bids were for deepwater tracts.

The next offshore lease sale is **OCS Sale 250**, which will be held in New Orleans in **March 2018**. OCS Sale 250 will be the first of two area-wide Gulf of Mexico lease sale offerings that the BOEM has planned for 2018.

#### **AGU FALL MEETING**

NOGS was well represented the AGU Fall Meeting held in New Orleans during December. In addition to numerous members who attended the conference, several NOGS members presented at poster sessions and talks. Jarrett Levesh, a grad student at UNO, presented research made possible by the NOGS Fault Atlas research initiative. Bobola Akintomide and Nancye Dawers from Tulane and Amanda Johnston from UL at Lafayette also presented results from projects supported by the NOGS initiative.



## girl scouts louisiana east

On Saturday October 21, 1,200 Girl Scouts attended the annual STEM BIG "Believe in Girls" event to learn about many careers in science, technology, engineering, and math. This was the 5th year that NOGS has been active at this great learning event. Most of the girls were between the ages of 10-16. They were exposed to demonstrations about the properties of oil, the geologic setting, and how geologists look for oil and gas fields. The girls really looked up to the women geologists, who were perfect role models. This year's volunteer contingent came from the local universities, NOGS, and environmental geologists. Tulane volunteers were Professor Cindy Ebinger and Sarah Oliva. Our LSU geology students were Mary Grace Moran, Natalie Helm, Elise Exnicios, and Kate Gutterman. Taylor Lee and alumni Rachel Carter represented UNO. Our other wonderful volunteers were Liz McDade, Claire Renault, Audrey Wong, Kristen Camp, Dom Smith, and Anna Strimas and her girl scout daughter Lily. Dave Cope brought his 3D workstation for the girls to see how geologists map for oil and gas. The girls had no problem visualizing how to oversaturate a porous sandstone with troops armed with eye droppers.

Believe In Girls









Proceedings will be published in *Oil-Industry History* 

Send Abstracts to: Dr. William Brice wbrice@pitt.edu

#### CALL FOR PAPERS

Abstract deadline: March 1, 2018



## 2018 HISTORY OF OIL SYMPOSIUM PETROLEUM HISTORY INSTITUTE SALT LAKE CITY

MAY 17-19, 2018, MARRIOTT RESEARCH PARK, SALT LAKE CITY, UTAH

Oil & Gas in Central Rockies & Basin-and-Range

For registration & more information:

Marilyn Black 814-677-3152 ext. 105 mblack@oilregion.org Registration/Evening Reception (May 17, Thursday)
Oral and Poster Presentations (May 18, Friday)
Field Trip (May 19, Saturday)

Venue: Marriott Research Park Hotel

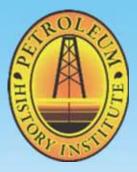
480 S. Wakara Way, Salt Lake City, UT

(801) 581-1000

The Symposium will be held just before the AAPG's 101 Annual Convention in Salt Lake City.

Petroleum History Institute, P.O. Box 165, Oil City, PA 16301-0165

www.petroleumhistory.org



#### PETROLEUM HISTORY INSTITUTE

To pursue the history, heritage & development of the oil & gas industry
Founded in 2003
P. O. Box 165
Oil City, PA 16301-0165
Publisher of Oil-Industry History

www.petroleumhistory.org

Petroleum History Institute (PHI) is a non-profit professional society active in preserving the history of oil and gas worldwide. It holds annual symposia and publishes annually the *Oil-Industry History*, the only peer-reviewed journal in English in this field.

We invite your company/institution to support the 2018 History of Oil Symposium, the first ever held in Utah. Sponsorship categories:

**Gold Sponsor** \$2000 includes 2 full registrations

**Silver Sponsor** \$1500 includes 1 full registration

**Field-trip Sponsor** \$1200 includes 2 free tickets for Saturday Field-trip

**Reception Sponsor** \$500 includes 2 free tickets for Thursday Reception

Friendship Sponsor \$500 includes 2 free tickets for Friday Banquet

Payment to Petroleum History Institute. A receipt will be issued by the PHI.

Funds will support the symposium's expenses including reception, banquet, field-trip, student registration/presentation, and subsidizing the overall PHI activities.

#### **Previous PHI Symposia:**

1996: Titusville, PA
2001: Oil City, PA
2003: Shreveport, LA
2004: Morgantown & Parkersburg, WV
2004: Morgantown & Parkersburg, WV
2014: Bradford, PA
2015: Tulsa, OK
2016: Casper, WY
2017: Findlay, OH

2006: Wichita, KS 2007: Long Beach, CA

2008: Sarnia & Oil Springs, Canada

2009: Titusville, PA 2010: Lafayette, LA 2011: Marietta, OH 2012: Houston, TX 2013: Pittsburgh, PA

## Have a Safe and Happy New Year's! From the staff of the NOGS LOG



610 E. Rutland St. Covington, LA 70433 985.898.3577 Jack M. Thorson Eric C. Broadbridge 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



Domestic & Internationa







## **BIOSTRATIGRAPHY**

#### ANYTIME, ANYWHERE, ANY FOSSIL

Complete paleo services

Largest single-source database

**Custom projects & mapping** 

Multiple fossil disciplines





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

PALEODATA.COM

504-488-3711

### 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, Uno Numella and Dr. Robert T. Sellars, Jr.

#### \$8,400

NOGS/PLANO Golf Tournament

#### \$1,000

**Chevron Your Cause** 

Volunteer Hours William D. Haworth and Allen J. Melillo

Mr. Armour C. Winslow

In Memory of Rita Menzel Winslow and Lawrence C. Menconi

#### \$500

Mr. Edward Falis, Sampling Associates International, LLC

In Memory of Willis E. Conatser

Mr. Arthur H. Johnson

#### \$250 to \$499

Mr. Carlo C. Christina

In Memory of Al Gilreath

Mr. Jeff Jandegian

In Memory of Dr. Raymond W. "Ray" Stephens, Jr., Ron Youngblood and William W. Craig

Mr. Edward B. Picou, Jr.

In Memory of Arthur H. Johnson, Willis E. Conatser, Bernard L. Hill, Jr., and Russell H. Nordwell

#### **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. Joseph E. Boudreaux

Mr. Merle J. Duplantis

Mr. Dwight Easterly

Mr. Kenneth Huffman

Mr. Tom Klekamp

Mr. James R. Landrem

Ms. Jeannie F. Mallick

Mr. William S. Peirce

Mr. Bay Salmeron

Mr. David M. Tatum

#### **UP TO \$249**

Mr. Woods W. Allen, Jr.

In Memory of William C. Ward

Mr. Maurice Birdwell

Mr. Hilary James Brook

In Memory of Al Gilreath

Mr. Rob Burnett

**Chevron Humankind Matching Funds** 

Mr. Arthur F. Christensen

**Trudy and Charles Corona** 

In Memory of Arthur H. Johnson, Peter G. Gray, and all deceased former past presidents of NOGS

Mr. Merle J. Duplantis

Mr. Kenneth Huffman

Mr. Tom Klekamp

In Memory of Arthur H. Johnson

Ms. Jeannie F. Mallick

Mr. Richard Olsen

Mrs. Teresa O'Neill

In Memory of Brian J. O'Neill

Mr. William S. Peirce

Mr. Jack N. Peterson M.D. and Mr. Tom R. Young
In Memory of Arthur H. Johnson

Cecil and Tanya Pickens

In Memory of Willis E. Conatser

Ms. Nancy Shepard

In Memory of Clark Kinler In Memory of Alfred P. Daigle **Shell Matching Funds** 

Dr. J. O. Snowden

Ms. Candace V. Strahan

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

Mr. David M. Tatum

Mr. William M. Whiting

In Memory of Arthur H. Johnson

Mr. and Mrs. James W. Yeldell

In Memory of Willis E. Conatser

Mr. Jim Zotkiewiez

**ANSYTHE** 

Donald I. Andrews

504-887-3432



C & R EXPLORATION, INC.

**CLASSEN EXPLORATION, INC.** 

Carlo C. Christina

Lawrence G. Ringham

#### THE BOEBEL COMPANY

Oil and Gas Investments

(504) 866-4313 New Orleans, LA 70153

James S. Classen Looking for close in deals

P.O. Box 140637 Boise, ID 83714

classenllc@msn.com

Bus. (208) 854-1037 Fax (208) 854-1029

#### **BOO-KER OIL & GAS CORP.**

Gray S. Parker

826 Union, Suite 300 Bus. (504) 581-2430 New Orleans, LA 70112 Fax (504) 566-4785

#### D-O-R ENGINEERING, INC.

3-D and Geoscience Services

6161 Perkins Rd. Bus: (225) 765-1914 P.O. Box 80812 Baton Rouge, LA 70898

**EDWARD B. PICOU, JR.** 

### Thanks Our Sponsors for Their Support!

\$2,500



New Orleans, LA 70130 **G**EOLOGY **E**NVIRONMENTAL **M**ANAGEMENT

**GEM Consulting, LTD** 

**Emmitt Lockard** emlockard@yahoo.com

**Michael Louis Merritt** admin@gemconsultingltd.com



Jim Zotkiewicz - Petroleum Geologist

Business Phone: 504.267.9138 Email: jimzot38@zotoil.com



#### Chevron





\$1,000

#### SIPES

Society of Independent Professional Earth Scientists

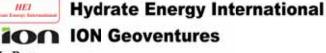


New Orleans Chapter

For membership info. Contact: Eric Broadbridge - eric@northcoastoil.com 504-884-0049 www.sipesneworleans.org







LaBay Exploration Co. LLC **Paleo Data Inc** 





REMEW OR Join Today!

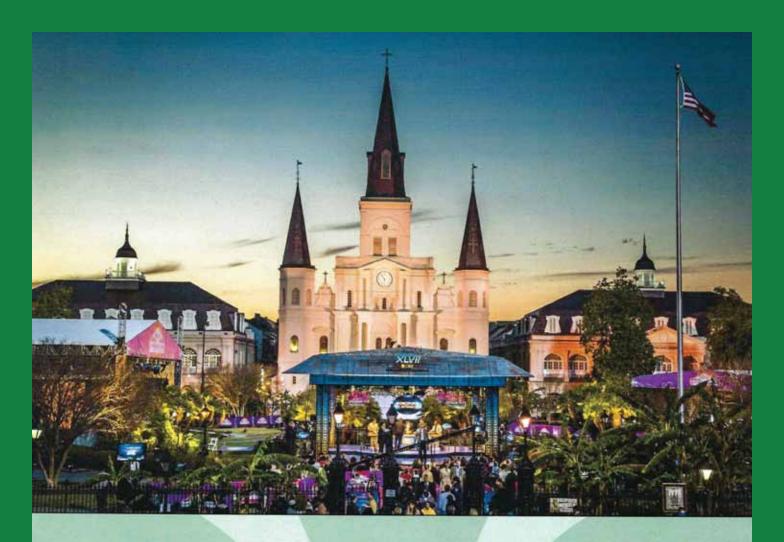


### LaBay Exploration Co., L.L.C.

1070 A West Causeway Approach Mandeville, Louisiana 70471

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

www.labayexploration.com





### **Annual Meeting**

New Orleans, LA April 10-14, 2018

The American Association of Geographers' Annual Meeting is an interdisciplinary forum where thought leaders and experts in geography, Earth science, and GIS intersect to build new partnerships and collaborations.

Meet local and international colleagues. Network and exchange ideas. Discover topical publications. Interact with state-of-the-art technologies.

Learn more about one of the official #AAG2018 themes - Hazards, Geography, and GIScience - at annualmeeting.aag.org/hazards.

## JOIN US annualmeeting.aag.org





# 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 or contact annette@nogs.org