

# NOGS LOG

APRIL 2017

Volume 57, Number 10



**APRIL 10 - NOGS LUNCHEON**

**Presentation: Faulting in Southeastern Louisiana: Misconceptions, Realities & Research Needs**

**Guest Speaker: Nancye H. Dawers, Ph.D.**

**Tulane University • New Orleans, Louisiana**





The combined profit from this event  
will benefit the  
Children's Museum Initiative  
on the north and south shores.

This year NOGS and PLANO are joining forces for the  
**2017 Annual Golf Tournament**

Please register early! We are limited to only 120 players.

**Money Hill Golf and Country Club**  
Abita Springs, LA

**Monday • May 1, 2017**

**Registration Form**  
on page 24 of this issue!

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

Post tournament dinner sponsored by  
**Diversified Well Logging**

Registration opens at 10:00 a.m.  
with Brunch served until tee time.

Price includes green fees, cart, range balls, food & drinks, flight, and prizes.

*What else could you possibly ask for?*

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**\$140/individual • \$650/corporate • Hole sponsors are \$125**

*A portion of your tournament participation fee will be tax deductible under the NOGS Memorial Foundation 501(c)3.*

***We need volunteers!***

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

**Donations of any kind are welcome!**



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**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).

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## on the cover

**Cover Photo Submitted by Bill Haworth**

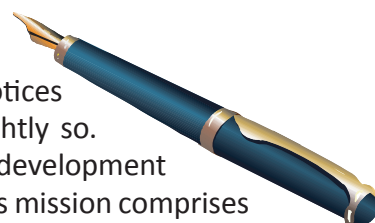
### Red Bluff, Mississippi

Located north of Foxworth, MS in the southern part of the state, Red Bluff is an erosional feature cut into the Pliocene/Pleistocene aged Citronelle formation where it has earned the moniker of “Grand Canyon of Mississippi.” Largely consisting of poorly cemented fluvial sands and gravels, the Citronelle is susceptible to the erosive power of precipitation and some groundwater movement. The bluff can be found on the western bank of the Pearl River and continues towards the southwest where it maintains a threat to the structural integrity of MS 587. The notable multicolored staining of the formation is derived from the chemical weathering of iron-rich sediments. More information on the geology of Red Bluff can be found in *Roadside of Geology of Mississippi* and *The Geology of Mississippi*.



## From the Editor

In your time as a NOGS member you’ve doubtless encountered a variety of notices entreating you to participate in some educational endeavor or another. And rightly so. Outreach to students is a central component of NOGS’s mission of “facilitating the development of the profession and science of Geology” as captured in our constitution. While this mission comprises numerous activities year-round, this coming month is the primetime programming for several of educational missions. April 15 marks the return of the annual Super Science Saturday at the Louisiana Children’s Museum in the CBD. Last year we had over 900 hundred children with their families explore hands-on stations highlighting dinosaurs, geology, and even the oil and gas industry. We had fifty volunteers from NOGS, local universities, and other community partners. Whether you’re an experienced volunteer or not, I encourage you to volunteer this year. By engaging with and reaching students in our community, we pass on the thirst for learning and dedication to service that was passed down to us by our own mentors.



**Laura**

**Laura Sorey, Editor**



Contact:  
Annette Hudson  
info@nogs.org

# 2017 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 2017 RATE!
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Eighth Page (3.75"x2.5")	\$600	\$300
Twelfth Page (3.75"x1.65")	\$375	\$188
Note Size (3.75"x.75")	\$120	\$60



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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

The AAPG will hold its 100th Annual Convention and Exhibition from April 2-5 at the George R. Brown Convention Center in Houston. The theme will be "100 Years of Science Fueling 100 Years of Prosperity". If you think back to the pre-petroleum era, one of the main purposes in drilling for oil was to produce kerosene for use in lamps, replacing whale oil. Fast forward to today where we now make over 6000 products from petroleum and where kerosene lamps are quaint throwbacks used mainly for decoration.

The transformation from a largely agrarian society to an industrial one would not have been possible without fossil fuels. After the dominance of coal in Industrial Revolution, much of human progress since the 19th century has been fueled by the substance that many of us have spent much of our lives finding and producing. Petroleum. We have every right to be proud to be part of the industry which has been responsible for allowing the tremendous improvements in our quality of life. Petroleum didn't increase the quality and quantity of the food we grow, but it made that increase possible. Petroleum didn't build better and safer homes, but it made them possible. Petroleum didn't create the plethora of drugs we have to combat

disease, but it made them possible. It is difficult to think of almost any aspect of our modern life that is not somehow dependent on petroleum.

In recent years, groups like AAPG and API have begun to get this message out to the public. As petroleum earth scientists, it behooves us to support these groups. If you are not a member of the AAPG, please join now. If you have coworkers who are not members, urge them to join. We must actively support the professional associations that represent us and advocate for our industry. Help us mark and continue the work of the past 100 years and all that petroleum has allowed our world to accomplish.

We have two big events coming up in April and May. On April 15th, we have a Super Science Saturday at the Louisiana Children's Museum. This is a great way to get young kids and their parents to see the positive side of the oil industry while learning about dinosaurs. On May 1st, we have the NOGS/PLANO golf tournament which will be held at Money Hill Golf and Country Club. Proceeds from the tournament will benefit the Louisiana Children's Museum and the St. Tammany Children's Museum. Come out to have a good time and support a great cause.

*Al Melillo*



# 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.



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## E-mail

allanmelillo@bellsouth.net
gregory.janevski@shell.com
hwdrock@aol.com
margaret.mckinney@tgs.com
kathy_riparian@bellsouth.net
nogseditor@gmail.com
greatmre@aol.com
brendaereilly@hotmail.com
jennifer.connolly@shell.com

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504-529-5155
985-773-6927
504-799-1648
504-887-4377
504-593-3623
504-529-5155
504-832-3772

bootscon@aol.com
amcgl2@tigers.lsu.edu
tbishnoi@tulane.edu
jrlfathe@uno.edu
reiterde@stoneenergy.com
lfeinmn1@cox.net
margaret.mckinney@tgs.com
bay.salmeron@chevron.com
kathy_riparian@bellsouth.net
daisy.pate@gmail.com
margaret.mckinney@tgs.com
epicou@bellsouth.net
Jeremy.Prouhet@chevron.com
jimzot38@zotoil.com
DGldthwt@aol.com
reiterde@stoneenergy.com
epicou@bellsouth.net
tom.bergeon@upstreamexp.com

## NOGS LOG STAFF

Editor	Laura Sorey	601-421-3352	nogseditor@gmail.com
Editor-Elect			
Auxiliary	NOGA Officers and Directors	NOGA	
Drill Bits	Al Baker	Beacon Exploration, LLC	504-836-2710
Drill Bits	Carlo C. Christina	Retired (C & R Expl. Inc.)	504-202-7997
Drill Bits	Kevin Trosclair	BOEM	985-893-2013
Staff Photographer	Arthur Christensen	Shalimar Consulting	985-893-2013
Layout / Printing	Kristee Brown	Creative Graphics & Printing, LLC	985-893-2013
Webmaster	Charles Miller	OCSBBS Website	504-439-3164

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Officers		Phone	Directors	Year	Phone
President	Trudy Corona	504-737-6101	Linda Pierce	2016-18	504-393-7365
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# April 10 • NOGS Luncheon

**Holiday Inn Downtown Superdome**

\$3.00 validated parking in hotel garage

## Presentation:

***Faulting in Southeastern Louisiana: Misconceptions, Realities & Research Needs***

## Guest Speaker:

**Nancye H. Dawers, Ph.D.**

Tulane University • New Orleans, 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**

### **April 2-5**

**AAPG Annual Convention & Exhibition**

George R. Brown Convention Center • Houston, Texas

For more information: <http://ace.aapg.org/2017>

### **April 11-12**

**LA Groundwater, Surface Water & Water Resources Symposium**

LSU - ECE Building • Baton Rouge, Louisiana

For more information: <http://lwri.lsu.edu/lawater-2017/>

### **April 15**

**SuperScience Saturday**

Louisiana Children's Museum • New Orleans, Louisiana

For more information: [tom.bergeon@upstream.com](mailto:tom.bergeon@upstream.com)

### **April 18**

**SIPES Crawfish Boil**

The Harbor Bar and Grill • Metairie, Louisiana

For more info: [eric@northcoastoil.com](mailto:eric@northcoastoil.com) or <http://sipesneworleans.org>

### **April 29**

**NOGS Geological Facts of Life for Flood Protection Field Trip**

SLFPA-W Headquarters • Marrero, Louisiana

For registration: [info@nogs.org](mailto:info@nogs.org)

### **May 1**

**NOGS Annual Golf Tournament**

Money Hill Golf Course • Abita Springs, Louisiana

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

## **NOGS CONTACT LIST**

*Continued from previous page*

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504-491-0683
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985-630-2480
504-975-6735
504-836-2710
504-846-9245
504-947-8495

#### **E-mail**

<a href="mailto:reiterde@stoneenergy.com">reiterde@stoneenergy.com</a>
<a href="mailto:allanmelillo@bellsouth.net">allanmelillo@bellsouth.net</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>
<a href="mailto:kelli.hardesty@erm.com">kelli.hardesty@erm.com</a>
<a href="mailto:bootscon@aol.com">bootscon@aol.com</a>

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2017(a)	G. Alex Janevski	Shell	504-425-6214	<a href="mailto:gregory.janevski@shell.com">gregory.janevski@shell.com</a>
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# April 10 NOGS Luncheon Presentation

☆☆☆ at the Holiday Inn Superdome ☆☆☆

## Faulting in Southeastern Louisiana: Misconceptions, Realities & Research Needs

*Presented by*

**Nancye H. Dawers, Ph.D.**

**Tulane University • New Orleans, Louisiana**

### ABSTRACT

Outside of the energy industry and the academic community, there are a number of misconceptions about coastal fault systems. Common ones are that all major faults strike E-W and dip gulf-ward, that the fault contribution to coastal landloss is understood, and that faults no longer interact with salt structures. Collaborative ongoing research across several Louisiana universities (UNO, ULL and Tulane) aims to provide a more scientifically accurate assessment of fault activity in order to better inform planners and policy makers, especially in the context of coastal restoration and longevity of critical infrastructure. Overarching observations are that the main Late Pleistocene-Holocene onshore fault systems – the Baton Rouge fault zone, the Lake Pontchartrain & Lake Borgne fault zones, and the Golden Meadow fault zone – differ in that the Golden Meadow fault zone (GMFZ) is still significantly salt-involved. Salt structures segment the GMFZ with fault tips

ending near or within ductile salt, resulting in highly localized fault-related subsidence separated by shallow salt structures that are inherently buoyant and virtually incompressible. Fault segments within the GMFZ include well-known marsh breaks, such as near Empire and Lake Enfermer, which are likely manifestations of transient slip events (known as slow slip events, or SSEs, in the rock mechanics and seismology literature) in an otherwise slowly creeping fault system. Shallow slip occurring in SSEs is promoted by weak fault zone materials, high fluid pressure in shallow sediments, and low confining pressure. As such, currently active coastal faults make excellent analogues for gravity-driven deltaic growth faults in general. A better understanding of the structural geology and mechanics of the currently active coastal faults will provide a holistic perspective, and possibly a new paradigm, for coastal restoration efforts.



### BIOGRAPHY

**Nancye Dawers** received her B.S. in Geology from University of Kentucky in 1984, an M.S. from the University of Illinois at Urbana-Champaign in 1987, and her Ph.D. from Columbia University in 1997. She is best known for her work on normal fault evolution and displacement-length scaling relationships, which began as part of her Ph.D. research. As a postdoctoral research associate at the University of Edinburgh, Scotland, she developed a love of





3d seismic data while working on continental rifting and syn-rift stratigraphy in the Brent Province. After joining the Tulane faculty in 2000, Nancye's research has focused on geomorphic expressions of active normal faults, including footwall topography in the Basin & Range, morphological response of channels to fault linkage, dike-related graben on Mars, and Late Quaternary faulting in coastal Louisiana.

At Tulane Nancye teaches Structural Geology, Tectonic Geomorphology, and Subsurface Geology, among other courses. From 2006-2008 she held the School of Science and Engineering's Ken & Ruth Arnold Endowed

Professorship. She has served on the Board of the New Orleans Geological Society, the Academic Liaison Committee of the American Association of Petroleum Geologists, and the Structural Geology & Tectonics Best Paper Award Committee for the Geological Society of America. Nancye was the convention vice-chair for the 2010 AAPG Annual Convention and Exhibition, held in New Orleans. In addition, she has served on the editorial board of the journal *Geology*, and on proposal review panels for the National Science Foundation and the American Chemical Society's Petroleum Research Fund.

**THE APRIL LUNCHEON RESERVATION DEADLINE IS APRIL 7.  
CONTACT THE NOGS OFFICE**

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

*The next luncheon will be held on May 8th. Our guest speaker will be announced later this month. Contact the NOGS office at 504-561-8980 or use the PayPal link at [www.nogs.org](http://www.nogs.org) to make your reservation.*



## **PUBLIC NOTICE OF DEEP STRATIGRAPHIC TESTS FOR HYDRATE-BEARING SEDIMENTS**

Gulf of Mexico Area

The University of Texas (UT Austin), as operator of a methane hydrate research program, is applying for federal permits to drill two deep stratigraphic test wells in the offshore U.S. Gulf of Mexico. UT Austin hereby invites all other interested parties to participate in this operation.

Two (2) proposed tests will be drilled in one (1) OCS location in the Gulf of Mexico for the sole purpose of obtaining scientific data and information. The purpose of drilling these holes is to acquire pressurized sediment cores and wireline log data. The planned commencement date of drilling operations is April 15, 2017. The drilling program is estimated to last 22 days and cost approximately \$11 million. The planned target depths for these wells are 1464-1724' BML, depending on the locations. No casing will be set. The drilling will be done riserless.

The applications for the permits to drill (APD) will request approval for Green Canyon 955.

Interested parties are invited to participate in the proposed operations and in acquiring the resulting data and information

on a shared cost basis. Any interested party may join the program as an original participant by committing, in writing, to the operator prior to 12:01 pm, Central Standard Time, April 15th, 2017, and thereby becoming obligated to bear its equal share with other participants of the cost, risk and expense to drill the stratigraphic test. Thereafter, a party may join as a late participant by committing to bear its share (along with the original participants) of the cost, risk and expense plus an additional amount in the maximum figure which is permitted to be charged to late participants as per 30 CFR Part 251.

Participation is available only on an individual or individual company basis. Participation as a representative of a group is not permitted.

Those interested in participating in the proposed test wells or obtaining further information thereof should contact Peter Flemings, Jackson School of Geosciences, University of Texas at Austin, Austin, TX 78712, (512) 475-9520 or [pflerings@jsg.utexas.edu](mailto:pflerings@jsg.utexas.edu).



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## CALENDAR OF EVENTS: APRIL — MAY 2017

*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](mailto:nogseditor@gmail.com) to be included in the monthly calendar.*

2017	EVENT	LOCATION	CONTACT / INFO
2-5 Apr	AAPG 2017 Annual Convention & Exhibition	Houston, Texas	<a href="http://ace.aapg.org/2017">http://ace.aapg.org/2017</a>
9 Apr	PIPE Family Fun Eat and Run	City Park	See announcement on page 28
10 Apr	<b>NOGS Luncheon</b> <b>Speaker: Nancy Dawers</b> <b>"Faulting in Southeastern Louisiana: Misconceptions, Realities &amp; Research Needs"</b> <b>Tulane University • New Orleans, Louisiana</b>	Holiday Inn Superdome	<a href="mailto:annette@nogs.org">annette@nogs.org</a> or 504-561-8980
11-12 Apr	11th Annual Louisiana Groundwater, Surface Water, and Water Resources Symposium	LSU Baton Rouge ECE Building	<a href="http://lwrrri.lsu.edu/lawater-2017/">http://lwrrri.lsu.edu/lawater-2017/</a>
15 Apr	<b>SuperScience Saturday</b>	Louisiana Children's Museum	<a href="mailto:tom.bergeon@upstreamexp.com">tom.bergeon@upstreamexp.com</a> For more information, see page 31
16 Apr	<b>Easter</b>		
18 Apr	SIPES Crawfish Boil	The Harbor Bar & Grill	<a href="mailto:eric@northcoastoil.com">eric@northcoastoil.com</a> <a href="http://sipesneworleans.org/">http://sipesneworleans.org/</a>
21 Apr	Tulane Lecture Series W. Ashley Griffith "Ultra-fast Fault rock Deformation in the Field and Laboratory" UT Arlington	Noon Tulane University Room 108, Jones Hall	<a href="http://www2.tulane.edu/sse/eens/events-and-seminars/seminars/index.cfm">http://www2.tulane.edu/sse/eens/ events-and-seminars/seminars/index. cfm</a>
21 Apr	LSU Lecture Series Peter Swift "Options for Deep Geologic Disposal of Radioactive Waste: Examples from the U.S. and other Nations" Sandia National Laboratories	LSU - Baton Rouge E137 Howe-Russell-Kniffen	<a href="http://www.lsu.edu/science/geology/seminars/item72050/php">http://www.lsu.edu/science/geology/ seminars/item72050/php</a>
28 Apr	Tulane Lecture Series Matt Rossi "A Tail of Two Extremes: Transformation of Rare Storms into Geomorphically Important Floods" UC Boulder	Noon Tulane University Room 108, Jones Hall	<a href="http://www2.tulane.edu/sse/eens/events-and-seminars/seminars/index.cfm">http://www2.tulane.edu/sse/eens/ events-and-seminars/seminars/index. cfm</a>
29 Apr	<b>NOGS Geological Facts of Life for Flood Protection Field Trip</b>	8:30 a.m. SLFPA-W Headquarters 7001 River Rd, Marrero, LA	See page 15 for more information
1 May	<b>NOGS Annual Golf Tournament</b>	Money Hill Golf Course Abita Springs, LA	<a href="mailto:annette@nogs.org">annette@nogs.org</a> or 504-561-8980 See announcement on page 2



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# 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 Invites Ron Drez to NOGA Gathering with Spouses and Guests at Ralph's on the Park

The New Orleans Geological Auxiliary hosted a beautiful pre-Valentine's Day gathering with spouses and guests on February 8 in the Oak Room at Ralph's On The Park. Co-Chairs Margie Conatser and Pat Williamson decorated the tables with lovely plants and chocolate kisses. Our guest speaker was local



historian and author Ron Drez. Ron and his wife Judy are dear friends of Mary and Roy Walther. Ron spoke about events leading up to World War II and the release of his new book, *Predicting Pearl Harbor: Billy Mitchell, Imperial Japan, and War*. As the large crowd finished their entrées, our guest speaker began his talk,

filling it with historic facts interspersed with bits of humor. Ron explained that General Billy Mitchell, an early proponent of military aviation, published a book in 1925 correctly predicting that a future war with Japan was likely and would probably start with a surprise air attack against the U.S. fleet at Pearl Harbor. Unfortunately, his book and the report it was based on were not widely read and had no impact on security measures taken to protect the fleet.

Ron is a graduate of Jesuit High School and Tulane University and has a master's degree in history from the University of New Orleans. He served

as a captain in the Marine Corps and saw combat in Vietnam as Commanding Officer of Company H, 2nd Battalion, 5th Marines. Ron was awarded two Bronze Stars, the Vietnam Cross of Gallantry with Silver Star for heroism in

combat, and the Presidential Unit Citation. In addition, Ron was a research associate to the late historian Dr. Stephen E. Ambrose. Furthermore, Ron is also author of ten books including *Voices of D-Day*, *The War of 1812*, *Conflict and Deception*, and *Remember D-Day*, an award-winning children's book for *National Geographic*.

By the time the April *NOGS LOG* is printed, Trez and Jim Zotkiewicz will have hosted the Spring Soirée at their home. Thank you, Trez and Jim, for not only hosting the event but for also opening it up to all NOGS members.



### New Orleans Geological Auxiliary Membership Application

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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**

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## 2017 ANNUAL SYMPOSIUM



**Findlay, Ohio**  
**130 Year Oil & Gas Celebration (1887-2017)**

**July 13-15, 2017**

**REGISTRATION AND EVENING RECEPTION**

Thursday, July 13, 2017

**PRESENTATIONS – ORAL AND POSTER**

Friday, July 14, 2017

Proceedings to be published in the 2017 volume of *Oil-Industry History*

**FIELD TRIP**

Saturday, July 15, 2017

For symposium details, see: [www.petroleumhistory.org](http://www.petroleumhistory.org)

**ABSTRACTS BEING ACCEPTED**

Please send abstracts to: Dr. William Brice - [wbrice@pitt.edu](mailto:wbrice@pitt.edu)  
or call Marilyn Black – 814-677-3152 ext. 105





# **NOGS Field Trip: Geological Facts of Life for Flood Protection**

## **Saturday, April 29, 2017**

**8:30 am: Coffee & Donuts • 9:00 am: Presentation Begins**

**Location: SLFPA-W Headquarters • 7001 River Road • Marrero, LA**

*Directions: Take Westbank Expy (US 90), exit Barataria Blvd (LA 50), head north to River Road (LA 541), turn left and proceed 1.5 miles to SLFPA-W building.*

**Trip Leader: Michael L. Merritt, LPG**

*SLFPA-W Commissioner and Licensed Professional Geologist*

- Presentation begins 9 am with transportation afterwards provided by SLFPA-W.
- No extended hiking or walking is necessary. People with handicaps can be accommodated. Please inquire beforehand.
- Three stops showing geological effects on critical engineering structures
- Includes Field Trip Guidebook for participants and 6 CEU credits for PG requirements
- Attendees buy their own lunch at Captain Larry's Seafood in Belle Chasse
- Return to SLFPA-W headquarters no later than 4 pm



**\$35 per person**

*(covers the printing of the supplied Field Trip Guidebook)*

**Space is available for only 32 participants...don't miss out!**  
**Register early at [info@nogs.org](mailto:info@nogs.org)**

# Goose Creek Oil Field, Harris County, Texas

## First Offshore Texas Oil Production (1917)

Jeff Spencer, GCAGS Historian

spencerj320@gmail.com • <https://petroleumhistoryblog.com/>

Editor's Note: This article was originally published in the March issue of the *HGS Bulletin*. Special thanks to Jeff Spencer and the *HGS Bulletin* for allowing us to reprint the article here.

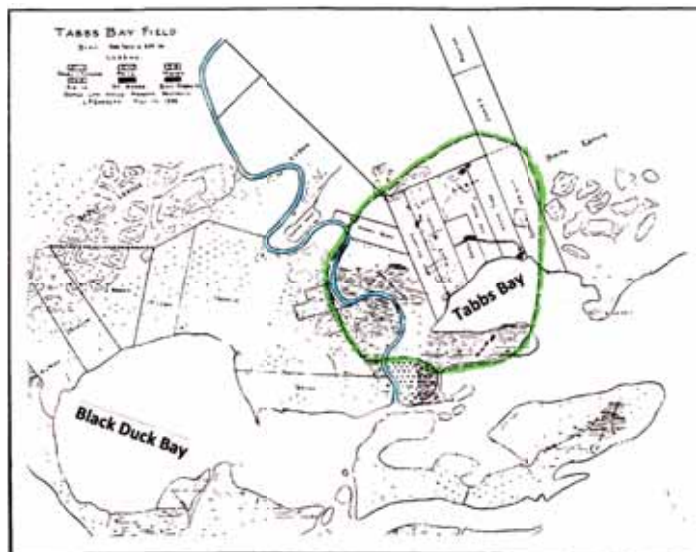
### INTRODUCTION

Goose Creek oil field is located in Harris County, Texas, approximately twenty-five miles east of downtown Houston. Oil was discovered at Goose Creek in 1908, but in 1916 multi-thousand barrel per day oil gushers brought attention to the area. Drilling progressed from the onshore banks of Goose Creek and the shoreline of Tabbs Bay to the bay's islands and then into the shallow waters of Tabbs and Black Duck bays. The field experienced a tremendous jump in oil production from approximately 600 thousand barrels of oil in 1916 to 7.7 million barrels in 1917 and peaked at 8.9 million barrels in 1918. This increased production was partially due to the expansion of the drilling into the offshore.

Many “firsts” occurred at Goose Creek, including the first offshore drilling along the Texas coast (1917), the first test of a 2-cone drilling bit (1909), and perhaps the first comprehensive study of land subsidence linked to oil, gas, and water production (1926) (Spencer 2013). Several scenes from the movie *Hellfighters* (1969) were filmed in and around Goose Creek (Spencer 2014). Over 1,500 wells have been drilled in the field and cumulative production exceeds 150 million barrels of oil.

### EARLY UNITED STATES OVER-WATER DRILLING

Over-water drilling in the United States occurred as early as 1891 in Grand Lake, Ohio (Sneed 2005), also known as Grand Reservoir, Lake Celina, or Grand Lake-St. Marys. In 1896, a pier was constructed 300 feet out into the Pacific Ocean in California, and a mounted standard cable-tool rig began drilling. The following year, oil production from the Summerland field began. Fourteen additional piers were constructed, and many more wells were drilled and completed. Caddo Lake, Louisiana had that state's first over-water drilling in 1911 with the Gulf Refining No. 1 Ferry Lake, claimed incorrectly on a historical marker as the “world's first over water oil well.” In Gulf Oil Company's 50th anniversary book (Thompson 1951), the claim as the “first over-water drilling in the country, and probably the world” is also made for Gulf's Caddo Lake drilling.



"Probable area of production" (green outline). L.P. Garrett's 1907 map (Minor 1925)

### OFFSHORE PRODUCTION AT GOOSE CREEK

The *Baytown Sun* (February 28, 1956) reported with the headline “Plain old kitchen match found Goose Creek field” that in 1905, Royal Matthews of LaPorte, Texas and local landowner John Gaillard rowed out into Goose Creek where Matthews lit a match to some bubbles which burst into flames. Fishermen as early as 1906 reported gas bubbling in the waters of Tabbs Bay.

L.P. Garrett (1880-1943) was a geologist from 1903-1908 with the Rio Bravo Oil Company, a subsidiary of Southern Pacific Railroad. In 1908 Garrett became the first geologist hired by the J.M. Guffey Petroleum Company, which had become part of the Gulf Oil Corporation the previous year. In his early years as a geologist, he was involved in the search for salt domes along the Texas-Louisiana Gulf coast.

In 1907, while at Rio Bravo, Garrett published an internal report on Goose Creek (Minor 1925). Garrett's report included a map with an outline of “probable area of production” that included both onshore acreage and part of Tabbs Bay (Fig. 1). Minor commented that Garrett's outline, based on paraffin beds and gas seeps, “coincides very closely with the field as it exists today.”

Drilling progressed from land locations, to the banks of Goose Creek (Fig. 2), to the shoreline of Tabbs Bay, and then to some of the islands in Tabbs Bay: Spillman's, Atkinson's, and Hog Islands (*Houston Post*, July 22, 1917). The building of wooden piers into the bay for drill sites was not reported as anything innovative or a “first” for Texas,



probably because Gulf had similar operations in Louisiana's Caddo Lake since 1911. Searching through company histories and Texas newspapers, it is not clear which well was the first offshore well in Tabbs or Black Duck bays or even which company drilled it. The *Houston Post* (April 22, 1917) reported on the Gulf Production Company's No. 4 Beaumont Petroleum coming in as "a gasser with some oil and sand" and that the well was "out in the bay." By mid-1917, wells operated by both Gulf and Humble were drilling in the two bays.

In Larson's history of Humble Oil Company (1959; p. 433), the company's first offshore Goose Creek drilling in 1917 is mentioned in only one sentence, which places the drilling in Black Duck Bay. Humble Oil acquired a 200 acre lease in Black Duck Bay in February, 1917 as part of a package of acreage the company purchased from the Houston Goose Creek and Houston Deep Well companies for \$720,000 (*Houston Post*, February 15, 1917).

Several newspaper articles from the summer of 1917 would suggest that the first oil gusher in Tabbs Bay was the Gulf Production Company No. 4 Stateland, drilled 200 feet out in the bay. The *Houston Post* (July 30, 1917) reported that the well came in July 28th with an estimated flow of 8,000 to 12,000 BOPD and "is the third producing well brought in by the Gulf Production Company in Tabbs Bay. No other companies have finished wells in the bay as yet."

The impact on Texas state revenues with the discovery of oil in Tabbs Bay was reported in the *Bakersfield Californian* (August 29, 1917). The state had leased "practically all of the area of the bay to different oil operators on the basis of one-eighth royalty." One producing oil well alone was "bringing to the state daily revenue of \$1,600" and there was "room for probably 100 wells." A promotional advertisement by the Gal-Tex Oil Company in the *Houston Post* (August 19, 1917) identified this well as Gulf's No. 4 Stateland and stated that the \$1,600 per day royalty "has paid for the salaries of the governor, lieutenant governor and several other State officials, and it has been flowing only 10 days."

The *Brookshire Times* of Texas (October 26, 1917) described another impressive well drilled in Tabbs Bay. With the headline, "Big gasser in bay now producing oil" the



Right half of a F.J. Schlueter panoramic photograph of the offshore drilling at Goose Creek oil field. <https://www.loc.gov/item/2007661609>

article read, "After blowing out sixteen joints of drill stem from the hole, the Humble Oil and Refining Company's No. 1 Beaumont Petroleum, out in Tabbs' bay at Goose Creek, changed from a gas well to an oil producer Friday and is now producing at the rate of about 8,000 barrels, according to officials of the company."

The well was drilling at about 2,850 feet in sand when it blew out Friday morning. It began making gas, running wild, as such a rate that it could be heard at La Porte (3 miles southwest). One report from Goose Creek was to the effect that the well made considerable sand during Friday afternoon. When it blew out, the drill stem was shot through the crown block and the derrick damaged. No one was injured, however.

By 1919, there were many wells drilled on wooden piers in Tabbs Bay. Figure 3 is a portion of a 1919 panoramic photograph taken by well-known Houston photographer, Frank J. Schlueter (1874-1972). Schlueter's photographs, including many of Goose Creek and other Texas Gulf Coast oil fields, can be viewed at <http://digital.houstonlibrary.org/cdm/landingpage/collection/schlueter>. Other photographs of the Goose Creek oil field can be viewed in Spencer (2013b; p. 40-47).

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Stereoview showing derricks along Goose Creek. Keystone View Company. Jeff Spencer collection.

# NOGS FINDS WINNERS

## AT 2017 REGION 9 SCIENCE AND ENGINEERING FAIR

*By Mike Fein*

On February 14th and 15th, NOGS members judged Junior Division and Senior Division Earth Science exhibits at the Region 9 Greater New Orleans Science and Engineering Fair at UNO. This year, the fair decided to split the competition into two days to include more students and categories in the Junior Division. My fellow judges in the Junior division were **George Hasseltine, Fran Wiseman, and Bill Whiting**; in the Senior Division, fellow judges were **Dave Cope, Art Johnson, and Tom Klekamp**. Thanks much!

Seven students shared the \$500 in cash prizes. The Junior Division required an extra third-place prize due to quality work by different young scientists that deserved to be recognized.

Our Senior Division winner was **Blythe Broussard** who studied "How do Grass Shrimp Tolerate Point Source Pollution from Used Motor Oil?" This was a study with unexpected results, which is the best way to learn WHY we do science. Blythe learned that just because the pollutant in the water increases the fatality rate with increasing concentrations, the animals themselves are far more resilient than she expected. You need to see this work! Blythe also won her category of Earth and Environmental and has been invited to the GENIUS (Global Environmental Issues) Olympiad. She also won the fair's Lagniappe Award.

The second-place senior exhibit was done by **Cebastian Rubio**. The title was "Freshwater Diversions," which used ternary diagrams to show changes in soil samples in several areas of South Louisiana. He did outstanding field work, and his geology was sound.

The third-place senior exhibit was done by **Ashley Seiser**, "Can Google Earth Be Used to Determine if Restoration Projects Have

Reduced the Amount of Land Loss in Coastal LA?" This project dovetails very nicely with the work being done now in our local universities regarding surface faulting and coastal land loss.

All three winners above were mentored by NOGS honorary life member **Cathy Boucvalt** of **John Curtis Christian School**. Cathy also most deservedly won the \$5000 mentoring award from the fair itself.

In the Junior Division, our first-place winner was **Dylan Bracey**, whose project was "Cleavage: Ulexite vs Galena." Dylan basically innovated a system to measure foot-pounds needed to cleave these minerals along their planes. His teacher at **Christian Brothers School** was **Thomas Constant**. Dylan was also a winner in his category of Physics and Astronomy and a first-place awardee from Broadcom Masters and NASA.

The second-place Junior winner was **Thomas Cecola**, also a student of **Mr. Constant** at **Christian Brothers School**. He studied "Barriers Against Coastal Erosion." He did a nice job with excellent before and after pictures.

The judges could not break a third-place tie and awarded two prizes. One prize went to a previous NOGS winner, **Isabella Pita**, for "Does Point Source (NO3) Pollution Affect Invertebrates?" The other winner was **Zachary LaBarre**, "How Does Saltwater Intrusion Affect the LA Coastline and Wetland Grasses?" They are both students of **Ms. Boucvalt** at **John Curtis**.

**Mr. Constant** of **Christian Brothers** also received a mentoring award from the fair.

Please come out to the May 8th luncheon and celebrate, enjoy, and learn from our first place winners and hear about some real geology done by some outstanding young students.

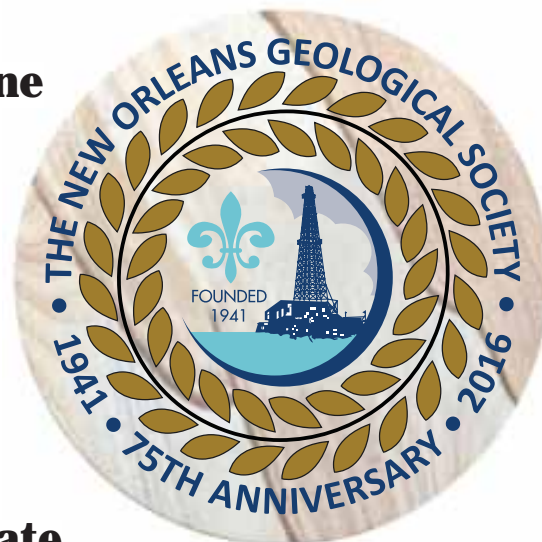
# NOGS 75th Anniversary

In honor of the 75th anniversary of the New Orleans Geological Society, we are releasing a series of office and personal mementos commemorating NOGS's seventy-five years of dedicated service to geology, professional development, and science education in New Orleans. If you're interested in purchasing any of these commemorative pieces, please contact Annette Hudson at [info@nogs.com](mailto:info@nogs.com) or 504-561-8980 for order details and exact pricing.

## 4" Round Variegated Sandstone

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Cork on back.



## 4" Round Slate

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Rubber feet on back.

## 6" Round Slate\*

*(pictured with optional stand)*

**\$25.00**

*with order of 50 or more*

**\$35.00**

*with order of less than 50*

## Optional Acrylic Stand

*(not pictured)*

**\$2.00**





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

LAFAYETTE DISTRICT, ONSHORE AREA

By Kevin J. Trosclair

The Baker-Hughes United States rig count for the week of January 27 was 712 rigs, up 54 rigs from the prior month. Rig activity in the U.S. continues to climb from a low of 404 rigs in May 2016. The Louisiana rig count (not including the OCS) averaged 30 rigs for the month of January. This is a slight increase from 27 rigs the prior month and down from 32 rigs one year ago.

North Louisiana Rigs: .....	28
South Louisiana Rigs: .....	6
Land .....	3
Inland Waters .....	3

## NEW LOCATIONS

In Jefferson Parish, Expert Oil & Gas has permitted an interesting well in **Westwego Field, (A)**, located on the south flank of the old field, with the bottom hole location falling in Sec. 23, T13S-R23E. The #1 CIB O RB SUA;MARRERO LAND, (SN 250058), will be drilled to a proposed depth of 11,153 feet, or 10,500 feet, true vertical depth, to test the Lower Cib Op sands.

Westwego Field was discovered in 1940 and more than 50 wells have been drilled in the field. The field went off production in 2000, and production was restored in 2004 with the completion of the Dominion E&P #1 City of Westwego. It has produced more than 13,200 barrels of oil over the past 15 years as a poor gas well and is currently the only producing well in the field. Expert Oil & Gas has a permit to drill another Cib Op test to a proposed depth of 9500 feet in Sec 5, T13S-R23E, approximately 1 mile to the northeast.

Key Operating Company has received a permit to re-drill a well in **Port Barre Field, (B)**, St. Landry Parish. The #1 Stanton, (SN 250082), will re-enter the Union Gas #1 Stanton, SN 239752, which was drilled in Sec. 39-T6S-R6E, to a depth of 15,583 feet and was perforated 11,258 to 11,264. On 8/2/2009, the well tested 821 BOPD and 1180 MCFG on a 10/64" choke with flowing tubing pressure 189 pounds. On 8/18/2009, the perforations were squeezed and the well was plugged and abandoned on 8/21/2009. No additional test information is

available. Several thin Wilcox sands are found between 10,900 feet and 11,400 feet. Key has permitted the well to a depth of 11,105 feet.

In St. Helena Parish MOON-HINES-TIGRETT Operating Company, Inc. has permitted 3 wells to test shallow Miocene sands. Each well is permitted to drill to a depth of 3100 feet. These wells are **Rank Wildcats**, with no production within miles of each location.

The #1 MIO RA SUA;DENKMANN ASSOC SC,(SN 249971), will be drilled in Sec. 34, T3S-R4E on the **Pigeon Creek Prospect, (C)**.

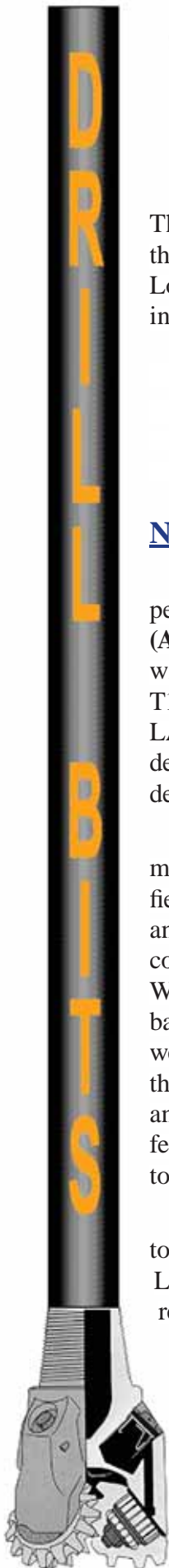
The #1 MIO RA SUA;DENKMANN ASSOC SC, (SN 249972), will be drilled in Sec. 3, T3S-R4E on the **Strother Creek Prospect, (D)**.

The #1 MIO RA SUA;DENMISS LLC JB, (SN 249973), will be drilled in Sec. 29, T3S-R5E on the **Jordan Branch Prospec, (E)**.

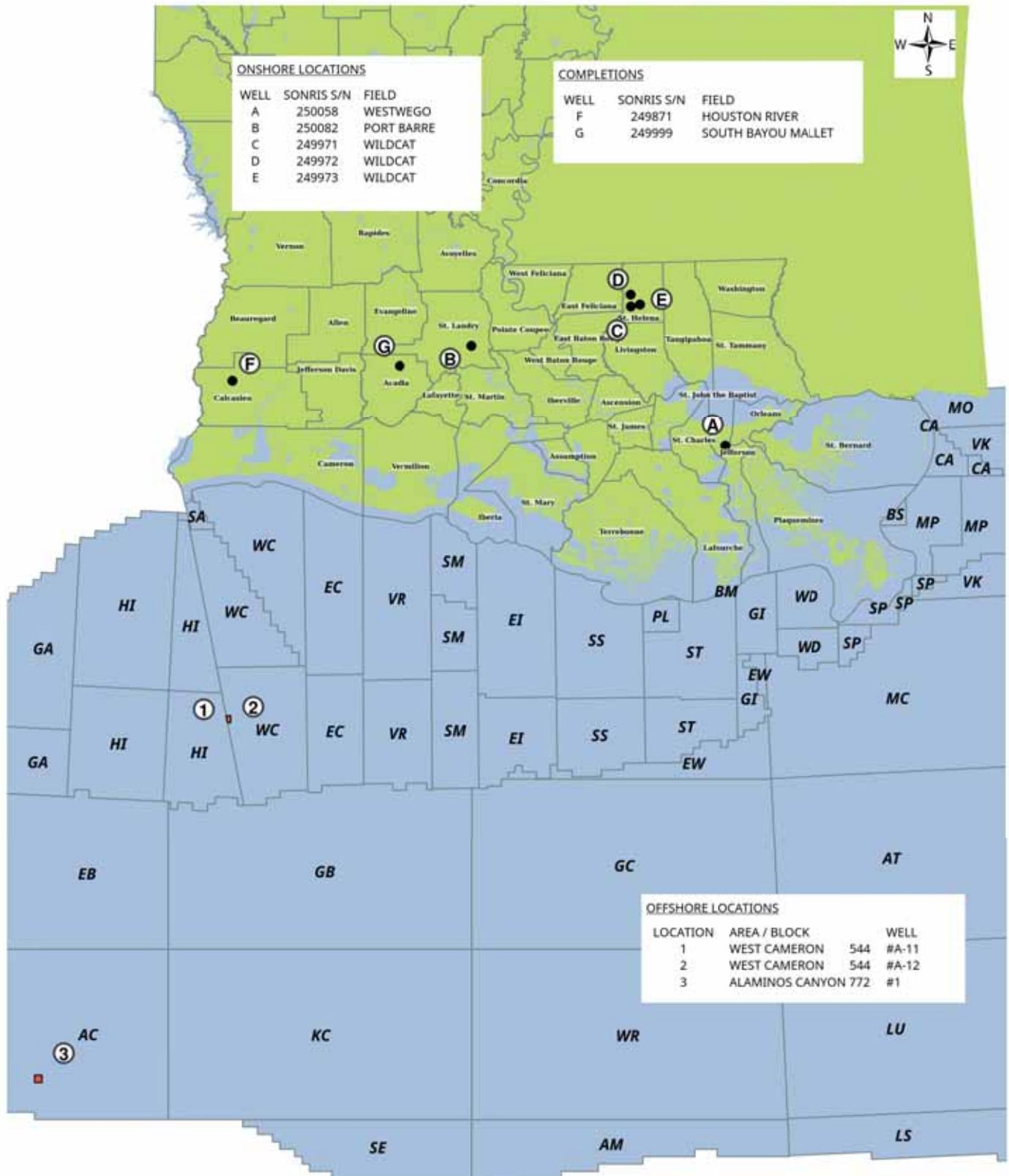
## COMPLETIONS

In Calcasieu Parish, **Houston River Field, (F)**, Magna Operating has completed its #1 HBY 3 RA SUB;WALKER LA, (SN 249871), as an oil well flowing 79 BOPD and 40 MCF through perforations 8016 to 8023 feet.

LLOX has drilled the #1 TW RE SUA;ANNE BELLARD LEGG, (SN 249999), in Acadia Parish, **South Bayou Mallet Field, (G)**, to a depth of 11,610 feet, where a liner has been set. The well will be perforated from 11,326 to 11,396 feet.



# Onshore & Offshore Activity Map for South Louisiana APRIL 2017



# OFFSHORE GULF OF MEXICO

## SHELF AND DEEPWATER ACTIVITIES

by Al Baker

During **February 2017**, the **BOEM** approved **52** Gulf of Mexico drilling permits. Of these, **10** were for shelf wells and **42** were for deepwater wells. Of the total number of permits, there were **2 new well permits** issued on the **shelf** and **1 new well permit** issued in **deepwater**.

**Arena Offshore** was awarded the two new shelf well permits for their **West Cameron 544 #A-11** and **#A-12** development wells.

The single new deepwater well permit in February was for an **exploration well**. It was issued to **Shell Offshore** for their **Alaminos Canyon 772 #1** well.

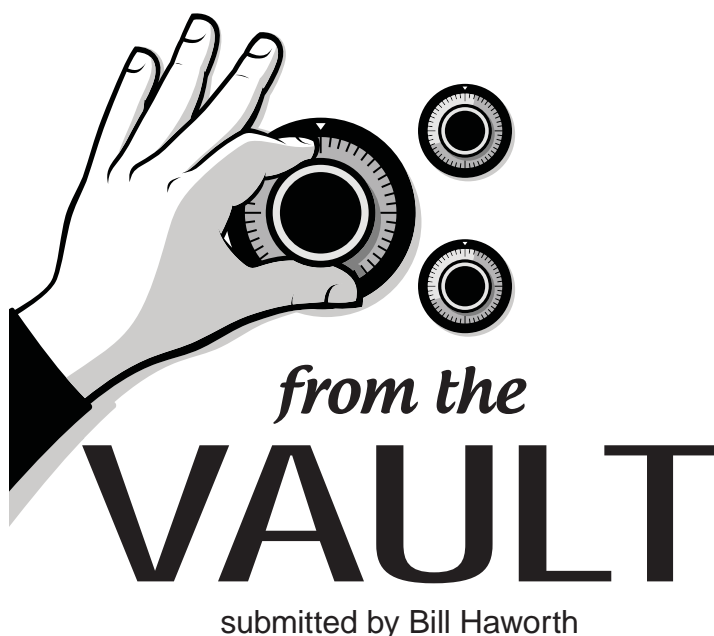
On February 24th, **IHS-Petrodata** reported that the Gulf of Mexico mobile offshore rig supply stood at **98**, which are **6** less than last month. The marketed rig supply consisted of **46** rigs, of which **33** were under contract. The marketed contracted versus total rig supply utilization rate is **33.7%**, while the marketed contracted versus marketed supply utilization rate stands at **71.7%**.

The marketed rig supply number and the contracted rig supply number are both **3** less than last month. In contrast, the February 2016 fleet utilization rate stood at **58.5%** (versus **46.9%** today) with **72** out of the **123** rigs under contract. It is obvious that higher oil prices have not yet affected the offshore rig activity in the Gulf.

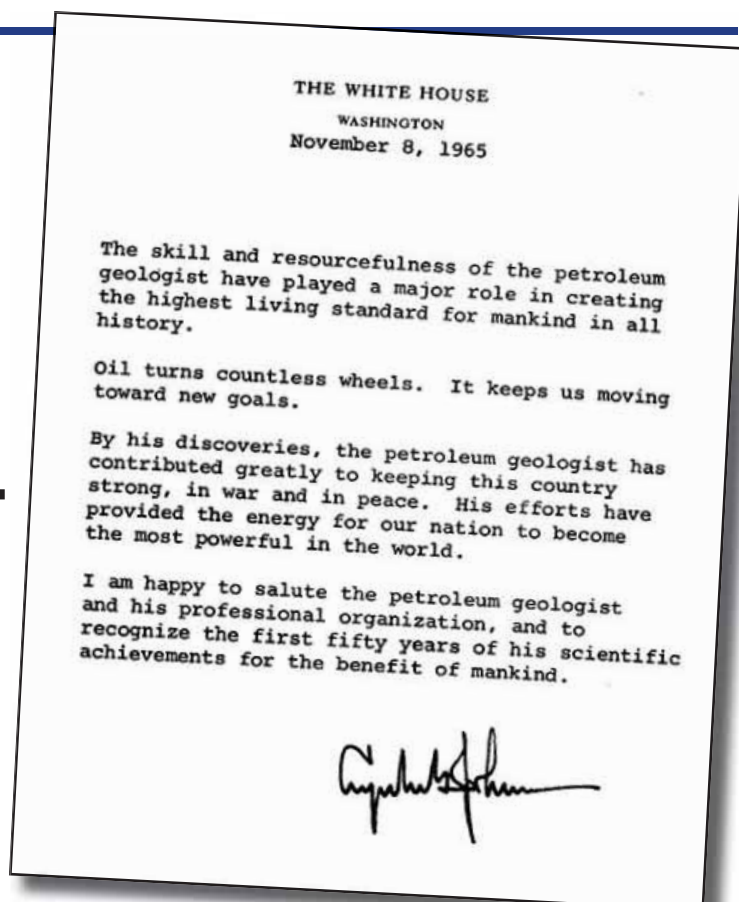
As of February 24th, **BakerHughes** indicated that there were **17** active mobile offshore rigs in the Gulf of Mexico, which is **51.5%** of the rigs under contract mentioned above. This active rigs number is **3** less than reported last month. Of the **17** rigs, **3** are located on the **shelf** and **14** are situated in **deepwater**. The current active rigs count compares to **27** active rigs during the same period last year, representing a **37%** decline (minus **10** rigs) in yearly rig activity.

As of February 24th, the **BakerHughes** total U.S. rig count stood at **754** rigs **down 61%** from the **September 26, 2014 high** of **1931** rigs, but up **350** rigs or **86.6%** from the **May 20, 2016 low** of **404** rigs. By comparison, the rig count stood at **502** rigs a year ago. Of the current **754** rigs, **602** are **oil rigs** and **151** are **gas rigs**. Texas has the largest number of rigs with **386**, which is over half (**51.2%**) of the total number of rigs.

No significant news was reported in the Gulf of Mexico during the month of February.



This letter to AAPG  
from President Lyndon B Johnson  
was originally published in the  
April 1966 *AAPG Bulletin*.





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\_\_\_\_\_ (\_\_\_\_\_ Handicap)

\_\_\_\_\_ (\_\_\_\_\_ Handicap)

*The tax deductible portion of your tournament participation fees is \$65 under the NOGS Memorial foundation 501(c)3 IRS status.*

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*Manager*

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# THE BOOKSHELF

## Geology and the Abyss of Time

By Laura Sorey

Several years ago I peered over the edge of a steep, grassy incline in eastern Scotland towards the churning waters of the North Sea and watched the waves break over the stony shoreline below me as I wondered how on earth I was supposed to get to the bottom without breaking my neck. Indeed, my undignified scramble down the embankment left me with a variety of minor injuries induced by barbed wire, Scottish thistle, and the occasional protruding rock. The dignified version of that trip took place almost 229 years ago in a small boat that contained a smattering of farmhands along with three Scottish gentlemen: Sir James Hall, John Playfair, and Dr. James Hutton, the leader of the expedition. This seemingly ordinary expedition to Siccar Point, where the angular unconformity of the tilted Silurian greywacke beds truncated by overlying Devonian Old Red Sandstone represents a 120 million year gap in time, would prove to be the inflection point in mankind's assessment of the basic mechanisms of the earth's primal foundation and the very notion of time itself.

Jack Repcheck gives an account of this trip and the larger scope of James Hutton's lifework in his book *The Man Who Found Time: James Hutton and the Discovery of the Earth's Antiquity*. Though Hutton's name is known amongst geologists, it has never achieved the familiarity within the public consciousness reserved for that coterie of scientific innovators like Newton, Darwin, Curie, and Einstein. In his narrative of Hutton's life, Repcheck builds a convincing argument against this oversight where he asserts that Hutton's recognition of deep time rather than a terrestrial chronology restricted by Christian orthodoxy, among Hutton's other scientific accomplishments, enabled Darwin to build his theory of evolution. A concept made possible by the

immensity of time argued for by Hutton and his spiritual successor, Sir Charles Lyell. According to Hutton, the accepted chronology simply failed to allot enough time for the world to develop to its current state. Rather than containing earth history within the prescribed timeline of Biblical creation, Hutton created a view of cyclical time in which the age of the earth is impossible to define due to its constant remaking and reordering of rocks. He encapsulated this viewpoint in his famous assertion that, "we find no vestige of a beginning, no prospect of an end."

Repcheck elegantly weaves the details of Hutton's field observations, the controversies induced by his assertions, and his role as a figure of the Scottish Enlightenment into the narrative of Hutton's life. The deft handling of these components allows Repcheck to compose a fascinating account of how the geologic setting of Scotland, the tension between science and religion, and the intellectual atmosphere

of the Scottish Enlightenment created a unique environment that propelled Hutton towards his eventual title of "Father of Modern Geology." Unlike Hutton's own writings, Repcheck's book is well-crafted and engaging to read. Though, for those unfamiliar with Judeo-Christian tradition, the early chapter on the development of chronologies by ecclesiastical scholars could be a bit of a slog. Fortunately, the captivating accounts of Hutton's field expeditions compensate for that moment of lagging in the narrative journey. Sometimes Repcheck finds that the best approach for conveying the electricity of these moments of discovery is to

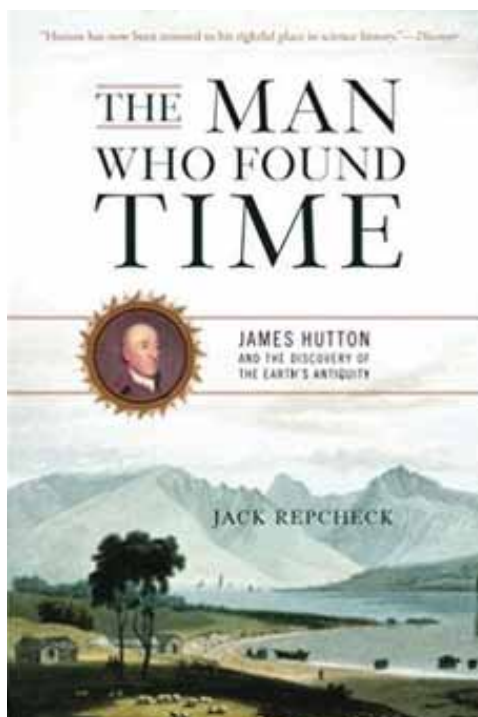
allow the participants like John Playfair to speak for themselves.

"The palpable evidence presented to us of one of the most extraordinary and important facts in the natural history of the earth...Revolutions still more remote appeared in the distance of this extraordinary perceptive. The mind seemed to grow giddy by looking so far into the abyss of time."

*The Man Who Found Time: James Hutton and the Discovery of the Earth's Antiquity*

By Jack Repcheck

247 pages. Perseus Books. \$17.





# "Family Fun Eat & Run"

## 5K and 1/2 Mile Run/Walk

**Sunday, April 9, 2017 ♦ City Park, New Orleans, La**

City Park will be the location for a great family event on Sunday, April 9th that will benefit three area children's museums. The event starts with a 5K run at 8:30AM followed by an amazing array of food. Last year's food included hamburgers, hot dogs, pork chops, gumbo, jambalaya, BBQ Shrimp, white beans and rice, armadillo eggs (chicken thighs stuffed with jalapenos wrapped in bacon), mini-muffalettas, ham pistolettes, roast beef pistolettes, and more! Adult beverages included beer, Margaritas, Bloody Marys, and more!

This will definitely be a family friendly event. There will be a DJ with Karaoke, inflatable bounce houses, treats, toy prizes, and more! There will be special shorter races for the younger children.

The event will be held at the site of the future Louisiana Children's Museum Early Learning Village. All of the proceeds from the event will go to the Louisiana Children's Museum in New Orleans, the Children's Museum of St. Tammany on the Northshore, and the Bayou Country Children's Museum in Thibodaux. The event is sponsored by PIPE (Petroleum Industry Promoting Education).

Food and drink are included with race entry. You can run if you want or just come out and have a great time! Register at [nolarunning.com](http://nolarunning.com).



**DATE:** Sunday, April 9, 2017

**TIME:**

- 7:00 am: Race Day Registration and packet pickup opens
- 8:30 am: Start of 5K Run/Walk
- 9:30 am: Start of 1/2 Mile Kids Fun Run/Walk

**LOCATION:**

City Park, New Orleans

- ◀ Site of the new Louisiana Children's Museum ▶  
( Intersection of Henry Thomas Drive & Palm Drive )

**PROCEEDS BENEFIT AREA CHILDREN'S MUSEUMS**

**Support the Louisiana Children's Museum-New Orleans,  
the Bayou Country Children's Museum in Thibodaux or the  
Children's Museum of St. Tammany-Northshore.  
Choose below to benefit one or all three Children's  
Museums.**

**ENTRY FEES:** Checks Payable to: NORSI

**ADULT (18 & OVER )**

- \$30.00 by March 20th
- \$35.00 by April 4th & at pre-race day packet pickup
- \$40.00 Day of Race ( Sunday, April 9th )

**YOUTH:\* Proof of age required at packet pickup**

- \$10.00 Age 11 to 17
- Free: Age 10-under

**HOW TO REGISTER:**

Online link posted at [www.NOLArunning.com](http://www.NOLArunning.com)

- **BY MAIL TO:** \* Postmarked deadline March 29th  
NORSI, P. O .Box 2348, Kenner, La 70063

**PRE-REGISTER In Person** ( Available at the following locations)

**\*\* Payable by check to: NORSI**

- Varsity Sports - New Orleans
- GNO Cyclery - New Orleans
- Louisiana Running & Walking, New Orleans & Metairie
- Elmwood Fitness Center, Harahan

**Packet pickup:** Date, Time, location ( posted later on website )

**T-SHIRTS:**

Event T-Shirts given out on the day of race to pre-registered entrants first. All entrants registered day of race will receive t-shirt as supplies allow. In event of reorder, details will be announced and posted on event website. Please keep race number and t-shirt tab to claim your shirt.

**AWARDS:**

5K: 1<sup>st</sup> overall, 1<sup>st</sup> , 2<sup>nd</sup> Place age groups 10-under thru 75-over  
1/2 Mile Kids Run/Walk: 1<sup>st</sup> overall, 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> place ages 6-under, 7-9, 10-12, 13-15  
Medallions to all 1/2 mile youth division finishers.

**POST RACE REFRESHMENTS ♦**

For our inaugural year's race we had this and more !

**Pork chops, jambalaya, BBQ Shrimp, White beans & Rice, Gumbo, Hot dogs, Hamburgers, Mini-Muffalettas, Ham Pistolettes, Roast Beef Pistolettes.**

**For adults only ( 21 -over ) Beer, Margarita's, Bloody Mary's, Hard Lemonade, Kentwood Spring Water**

**For the Kid's: DJ with Karaoke, Bounce Houses, Lemonade, Sno Balls, Funnel Cakes, Toy Prizes and more.**

**RACE INFORMATION:**

- ❖ **PRODUCED BY:** New Orleans Running Systems, Inc. and PIPE
- ❖ **WEBSITE:** [www.NOLArunning.com](http://www.NOLArunning.com)
- ❖ **EMAIL:** [chucknorsi@cox.net](mailto:chucknorsi@cox.net)
- ❖ **RACE DIRECTOR:** Chuck George
- ❖ **PHONE:** 504-884-7565

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