

# NOGS LOG

DECEMBER 2020  
Volume 61 No. 6



*Merry  
Christmas*



# NOGS DECEMBER MEETING

MONDAY, DECEMBER 7, 2020 11:30 AM  
ZOOM MEETING

## QUANTIFYING CONTROLS ON STRATAL GEOMETRIES IN CLASTIC SEDIMENTARY SYSTEMS



*Presented by:*

***Robert C. Mahon***  
***University of New Orleans***

Robert Mahon is an Assistant professor in the Earth and Environmental Sciences and Civil and Environmental Engineering departments at UNO. He came to New Orleans following a postdoc at U. Arkansas and PhD at U. Wyoming.

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# IN THIS ISSUE



## On the Cover

### Shell's Perdido Spar

The Perdido Spar achieved first commercial production in 2010 from a new geological frontier in the US Gulf of Mexico, the Lower Tertiary/Paleogene. The project applied innovation to tackle challenges such as extreme water depth, rugged sea-floor terrain, and low-temperature and low-pressure reservoirs. Shell's Perdido Spar is floating in more than 8,000 feet of water in the Gulf of Mexico's Alaminos Canyon area – and an important component of how Shell and its partners once solved production infrastructure problem there. It's also symbolic of the importance the deepwater Gulf Continues to play in today's energy picture.



## *From the Editor...*

Thanks to all those who continue to contribute to the monthly LOG. If you have any suggestions for future issues or have an article/photo(s) to contribute, please email me at [cmiller@ocsbbs.com](mailto:cmiller@ocsbbs.com). We would certainly love your input and any additional LOG content to be considered that may be of interest to NOGS members.

*Charlie*



Charles Miller III  
NOGS LOG Editor





JOHN R. DRIBUS

## A MESSAGE FROM NOGS PRESIDENT

To members and friends of the New Orleans Geological Society:

I sincerely hope that all of you have had a chance to get outside this week and enjoy our fantastic weather. I'm grateful to see the cooler temperatures finally arrive, but unfortunately the virus is seeing bit of a resurgence as well, so please be careful out there. Our Governor has decided it is best to step back and to put Louisiana in a modified Phase Two, and we are under a statewide mask mandate. For more details on Phases, please visit the Louisiana Department of Health website at <http://ldh.la.gov/Coronavirus/>.

NOGS will continue to hold monthly meetings on-line at least through the end of Q-1, 2021, and hopefully restart our live luncheon program in the Spring. During 2020 we have held three live luncheons at the Holiday Inn before the virus arrived, and since then, we began our on-line webinar series which will continue on December 7th, with a talk on clastic sedimentary depositional systems from Dr. Robert Mahon from UNO. We have had six on-line talks this year thus far, and I am grateful to our excellent speakers and NOGS members and friends who continued to support our program by attending these talks. I thought the November talk by Taury Smith on the unconventional shale plays was very informative; and we had an excellent turnout, even attracting a few listeners from Houston. There also continued to be several on-line opportunities this month for geologic content besides our webinar series. The Houston Geologic Society (HGS) and the Petroleum Exploration Society of Great Britain (PESGB) held their joint African Conference on-line every Thursday in October, and the 24th Annual Gulf of Mexico Deepwater Technical Symposium provided an excellent program from November 9-13.

NOGS is now offering our new calendars along with an array of NOGS logo memorabilia items like t-shirts, mugs, etc. to assist you in your holiday shopping. As always, the money we collect from annual dues and the sales of these items from the NOGS on-line store help to fund our local Children's Museums and other programs. Thanks to the 80 golfers who participated in our tournament at Beau Chene, which contributed \$5,000.00 to our two museums.

As I close my letter today I look forward to a time when the results of the Presidential election are known, and our industry can begin planning for any changes that may occur in Federal regulations that will affect the future of hydraulic fracturing and offshore leases sales in Louisiana. Enjoy our beautiful weather, and I hope to "see" you at our December webinar.

Stay safe NOGS!

Regards,  
John Dribus



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# PICTURE FROM THE PAST



**NOGS member Mike Merritt chats with his replacement on the Southeast Flood Protection Authority – West, Dr. Philip J. Valent. Mike served on the Authority for eight years and organized a NOGS Field Trip, held on October 29, 2016, to view flood protection improvements on the west bank. Photo taken at LSU during the symposium sponsored by the Louisiana Geological Survey and NOGS, October 17-18, 2019.**

*Submitted by*  
**Ed Picou, Chairman - Historical Committee**

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The New Orleans Geological Society was organized on October 3, 1941, as a non-profit organization for the purpose of facilitating the development of the profession and science of Geology, with specific emphasis to exploration and production of petroleum and natural gas. Secondary related objectives include the dissemination of pertinent geological and environmental technological data, and the maintenance of a high standard of professional conduct of its members. The full history of the Society can be found at [nogs.org](http://nogs.org).

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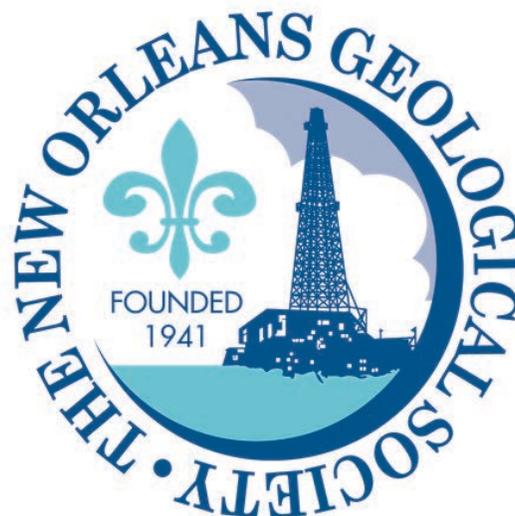
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# DRILL BITS

OFFSHORE GULF OF MEXICO SHELF AND  
DEEPWATER ACTIVITIES  
BY AL BAKER

During October 2020, the U.S. Department of the Interior Bureau of Safety and Environmental Enforcement (BSEE) approved 75 Gulf of Mexico (GoM) drilling permits. Four of the permits were for shelf wells, and the remaining 71 permits were for deepwater wells. Of the total number of permits, there were 4 new well permits issued, all in deepwater.

Two of deepwater new well permits were for exploration wells, and 2 were for development wells. Anadarko Petroleum was given a permit for their Keathley Canyon 918 #3 exploration well in Lucius Field. BOE Exploration & Production was granted a permit for their Green Canyon 944 #1 exploration well. LLOG Exploration Offshore received a new well permit for their Mississippi Canyon 503 #7 development well in Who Dat Field. Eni US Operating Company was awarded a new well permit for their Green Canyon 385 #3 well in Pegasus Field.

On October 30th, IHS-Petrodata indicated that the GoM mobile offshore rig supply stood at 62, which is the same as last month. The marketed rig supply consisted of 35 rigs, of which 23 were under contract. The marketed rig supply and the contracted rig supply number were also the same as last month. The marketed contracted versus total rig supply utilization rate stood at 56.5%, and the marketed contracted versus marketed supply utilization rate stood at 65.7%. By comparison, the October 2019 total fleet utilization rate stood at 57.7% with 41 rigs under contract out of the 71 rigs in the fleet.

On October 30th, Baker Hughes reported that there are 13 active mobile offshore rigs in the GoM, which is 56.5% of the rigs under contract mentioned above. This active rigs number is 1 less than reported last month. Currently, all 13 rigs are drilling in deepwater. They include 8 rigs in the Mississippi Canyon Area, 2 rigs in the Walker Ridge Area and 1 rig each in the Green Canyon, Garden Banks and Alaminos Canyon Areas.

On October 30th, the Baker Hughes total U.S. rig count stood at a total of 296 rigs, which is 35 more rigs than reported at the end of September 2020. Of the 296 rigs, 221 (74.7%) are oil rigs and 72 (24.3%) are gas rigs. The remaining 3 rigs are listed as miscellaneous. A year ago, there were 822 rigs working in the U.S. inferring that the current rig figure represents a 64% decline in rigs year over year. Texas continues to have the largest number of rigs presently with 133, which is 44.9% of the total number of rigs in the U. S. Louisiana currently has a total of 37 rigs, down 2 rigs from last month. Nationwide, Louisiana still ranks third in the rotary rig count. New Mexico continues to rank second with 47 rigs.

Recently, Shell Oil Co. completed a Middle Miocene oil discovery in Mississippi Canyon 812. The OCS-G 34460 #K-3 ST-3 well was drilled to 29,739 feet MD (23,343 feet TVD) and was perforated over the interval 29,218 feet to 29,345 feet. The well flowed at a rate of 12,478 BOPD (33.5 degree API) and 25.725 MMCFPD on a 36/64" choke with 9,897 psi FTP.



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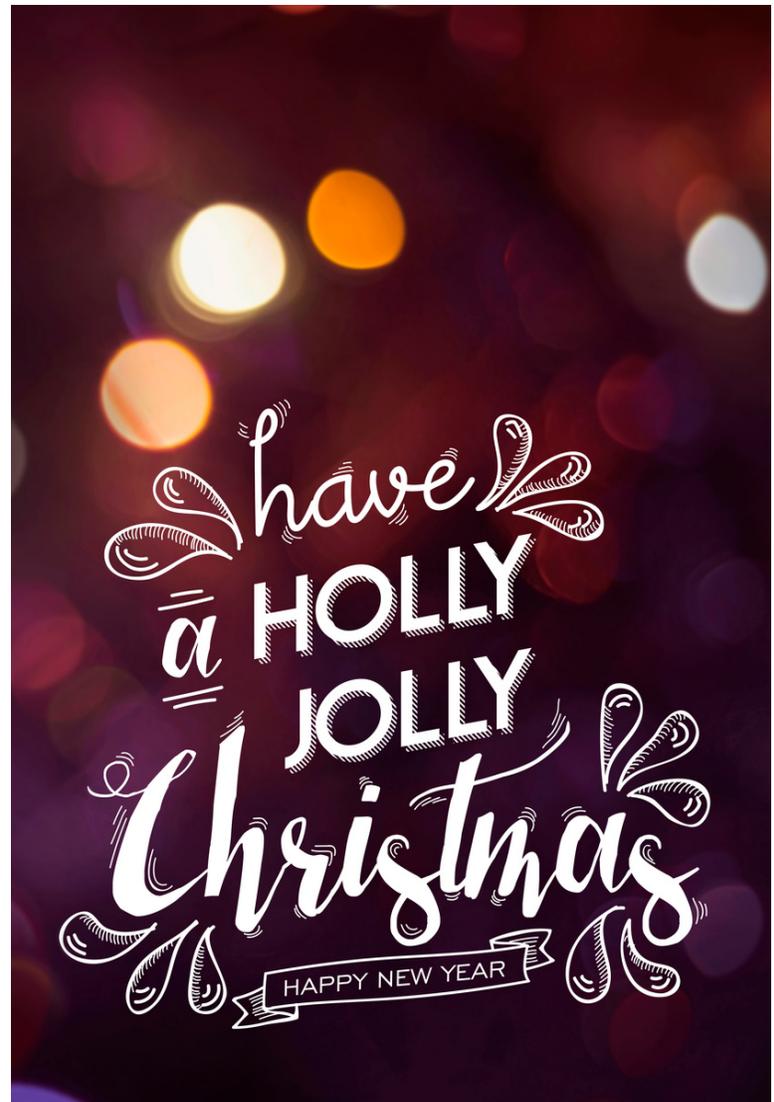
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# Oil Industry Headlines .....In The News (October2020)

**11/4/2020 - Mid-Con Energy merges with Contango Oil & Gas** - Mid-Con Energy, involved in oil and natural gas producing assets in North America, has agreed to a business merger with independent oil and natural gas company Contango Oil & Gas.

**11/5/2020 - LLOG finds some success in deep offshore wells, looks to sell oil by 2022** - Covington-based LLOG Exploration found some successful oil production in two deepwater wells in the Gulf of Mexico after its initial discovery in mid-2019. The Spruance discovery happened when the company and its partners drilled below 1,600 feet of water using a subsalt exploratory well. Since then, one well has been drilled 17,000 feet and has shown about 150 net feet of oil play.

**11/8/2020 - How Joe Biden's plan to transition from the oil industry could impact Louisiana** - Some major companies are already transitioning. Last week, Shell announced it would close a plant in Saint James Parish to move to greener industry. That was a loss of 675 jobs.

**11/9/2020 - Biden Election Likely To Impact Offshore Energy Production Over Time** - The Biden Plan for a Clean Energy Revolution calls for "banning new oil and gas permitting on public lands and waters," as part of the goal to ensure that the U.S. achieves net zero emissions by 2050 to forestall catastrophic climate change. If enacted, such a ban over time would lead to an inevitable decline in hydrocarbon production from the offshore region, as existing energy-producing fields play out with no new drilling occurring to replace that production.

**11/9/2020 - Hess sells 28% stake in Gulf of Mexico's Shenzi field to BHP** - Oil and gas company Hess Corporation has completed the sale of its 28% working interest (WI) in the Shenzi field for a total consideration of \$505m.

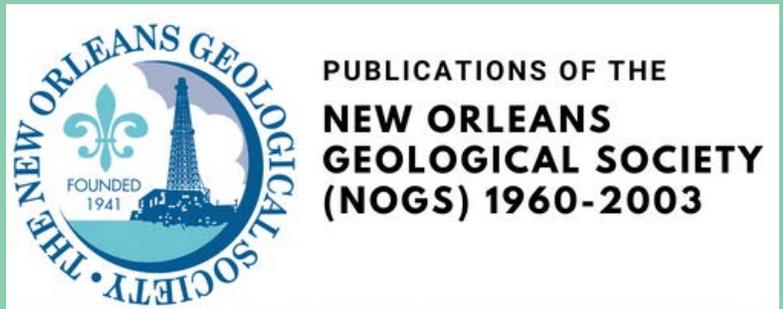
**11/11/2020 - Oil Majors Are Eyeing Mexico's Deepwater Sector** - Deepwater exploration appears to be the focus of major investments in Mexico in Q3. As state-controlled oil company Pemex focuses on easy-extraction shallow water projects, private players set their sights on deepwater alternatives. International companies are seizing the opportunity to explore Mexico's reserves, with two exploration projects from Shell and one from China National Offshore Oil Corporation (CNOOC). According to Mexico's National Hydrocarbons Commission (CNH), exploration of deep and ultra-deep waters accounted for 45% of investments and 80% of reserves in the last quarter.

**11/17/2020 - U.S. BOEM to Hold First 2021 Offshore Oil and Gas Lease Sale in March** - Bureau of Ocean Energy Management (BOEM), a Department of Interior agency responsible for the management of offshore energy leases, has picked March 2021 for the first U.S. Gulf of Mexico lease sale next year. BOEM will offer 78.2 million acres for a region-wide Gulf of Mexico lease sale.

**11/18/2020 - Gulf of Mexico Lease Sale Yields More Than \$120 Million in High Bids** - In support of President Donald J. Trump's America-First Offshore Energy Strategy, Deputy Secretary of the Interior Kate MacGregor and the Bureau of Ocean Management's Acting Director Walter Cruickshank today announced that region-wide Gulf of Mexico Lease Sale 256 generated \$120,868,274 in high bids for 93 tracts covering approximately 79 million acres in federal waters of the Gulf of Mexico. A total of 23 companies participated in the lease sale, submitting \$135,558,336 in total bids.

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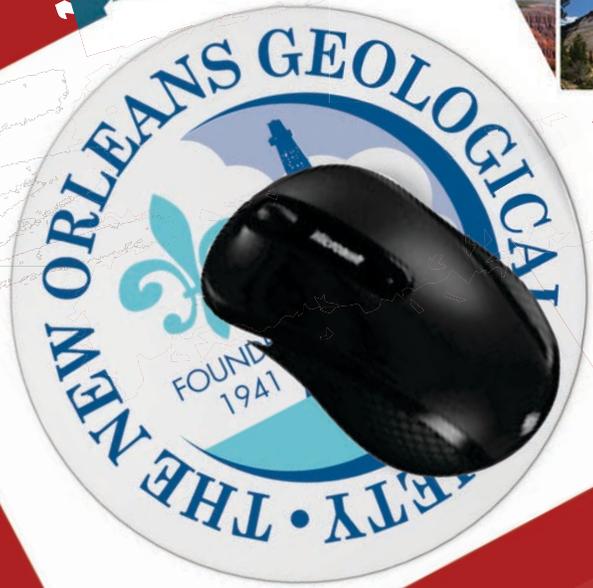
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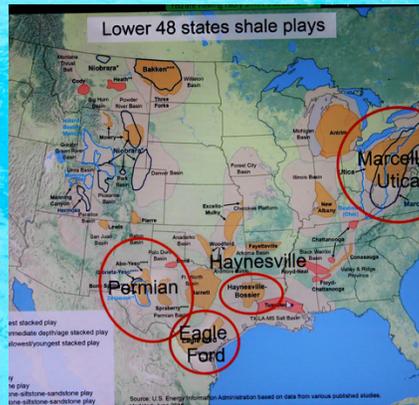
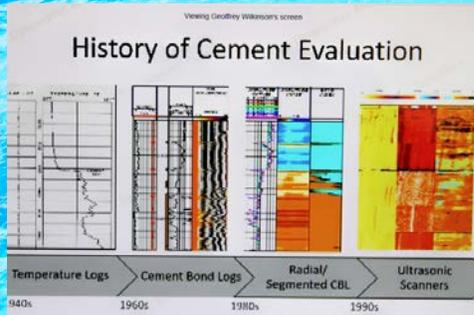
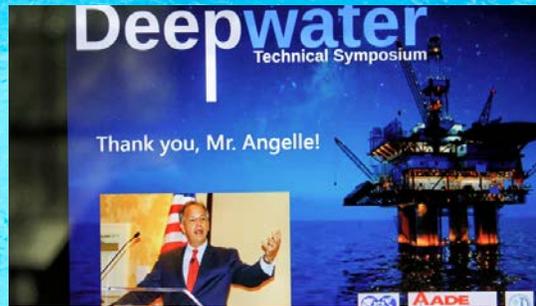
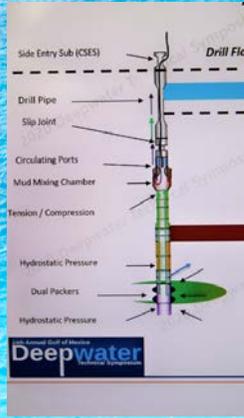
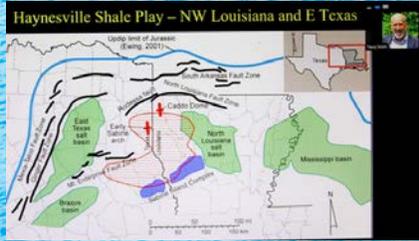


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