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Volume 64 No. 10

NCGS LOG



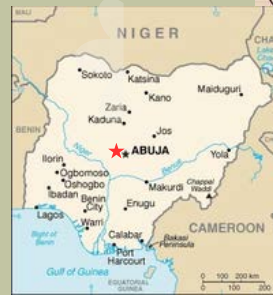
HELLO
spring

On the Cover

Zuma Rock, Abuja, Nigeria

Few geological wonders in Nigeria are as profound as Zuma Rock, located west of the capital Abuja. In fact, it is of such cultural significance that it was featured on the back of the 100 Naira note before it was redesigned in 2014 (see right). One of the tallest monoliths in the world, the 160 million-year-old gabbro-granodiorite igneous intrusion stands a staggering almost 2,400 feet tall along the highway.

One side of the rock is eroded in such a way that an ominous face appears, complete with eyes, nose and mouth. The rock holds cultural significance to several Nigerian ethnic groups, including historically being considered a deity, location for sacrifices, and a defensive structure during intertribal wars. Some locals believe evil spirits inhabit the land at the bottom of the rock. A hotel with the rock's namesake, the Zuma Rock Hotel, was abandoned before construction was complete because residents believed it was located in the haunted zone.



[Cover Photo Source Link](#)

From the Editor...

Greetings Everyone,

I can't believe spring is already here! My apartment is off the ground, so I am especially thankful that the cold weather is out of here.

We have some exciting things coming up soon with NOGS. First, our annual golf tournament and seafood boil will be April 29th. Please see the flyer on page 6 for details. Second, in August is the Deepwater Technical Symposium. The Geology Seminar this year will feature a full day course about CCUS. NOGS will also sponsor three additional short courses during the Symposium. See pages 13-14 for more details.

As always, if you have any suggestions about content or would like to contribute to the Log, please reach out to me at editor@nog.org!



Brittany

Brittany George
2023/2024 NOGS Log Editor





MARK WOJNA

A MESSAGE FROM THE 2023/2024 NOGS PRESIDENT

Springtime is here. My yard is coming to life once again. All of the deciduous trees and plants are covered with new green leaves. The azaleas are in their final stages of providing color. As I leave for work each morning, the air is filled with the sweet scent of the Sweet Olive trees blooming. The Confederate jasmine plants are about to explode with flowers and their amazing fragrance. Jazz Fest is just around the corner. And one of my favorites, Chaz Fest returns this year as well. The annual NOGS Golf Tournament and crawfish & shrimp boil is April 29th at Beau Chene Country Club in Mandeville. If you haven't signed up yet, please do. Information is available on the NOGS website and in this issue of the NOGS Log. It also looks like we're going to get to experience some NBA Playoff basketball later this month. Go Pelicans!

The American Association of Petroleum Geologists (AAPG) is the premier professional society for geologists working in the oil and gas industry. The AAPG was founded in 1917. Membership currently stands at around 30,000 members worldwide. The monthly AAPG Bulletin is a leading scientific journal in petroleum geology. The monthly AAPG Explorer is an informative magazine providing professional development news, summaries of current events and conferences and relevant discussions of current developments in the world of oil and gas. The AAPG website www.aapg.org is something I access quite frequently in my work. If you work in the oil and gas industry I would strongly urge you to join AAPG. For those of you who are already AAPG members please take a moment to make sure that your membership dues are paid and your membership is current and up to date. AAPG is run as a democracy. All active members vote in society elections and help decide the future of the society. Recent efforts to merge the AAPG with the Society of Petroleum Engineers (SPE) were voted down by AAPG geologists. There have been discussions of dropping American and Petroleum from the society name. Elections matter. Stay informed. Remain engaged in your professional societies and stand up for what you believe in. I've been a proud member of the AAPG since 1982.

As most of you may be aware, NOGS is working on expanding our membership base to other industries besides petroleum. Chase Cromwell with Leaaf Environmental will be presenting a "Brief Introduction to UST Site Investigations" at the April 10th NOGS Monthly Meeting. I hope that you can attend the meeting and join me in welcoming the new members to our Geological Society.

The current NOGS Board term ends June 30, 2024. A number of board members will remain on the new board starting July 1, 2024 to provide continuity and leadership for our society. We are looking for new volunteers to step up and serve on the NOGS board moving forward. Personally, it's been a very rewarding experience to serve on the board. I've met a number of professionals in our community since joining the board. NOGS was formed in 1941. It has always relied on membership to provide leadership and direction for future growth. The current board would love to see someone from the environmental geology industry join the board. The more diverse voices our professional society has, the stronger we will become. Earth Science and geology are playing an important role in Louisiana's future. NOGS value in the future will be to bring geologists with diverse backgrounds together and provide opportunities for professional development and growth.

Mark J. Wojna

2023/24 NOGS Board

Mark Wojna



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NOGS APRIL MEETING

Wednesday, April 10, 2024

11:30 am Networking

12:00 pm Presentation



Country Inn & Suites® by Radisson,
2713 N Causeway Blvd. Metairie, LA



BRIEF INTRODUCTION TO UST SITE INVESTIGATIONS



CHASE CROMWELL LEAAF ENVIRONMENTAL, LLC

Professional Geologist (PG) licensed in LA & MS.
Started working at LeaaF in 2016. Currently
managing the UST & Remediation Division.

Conducting environmental site investigations in accordance with the Louisiana Risk Evaluation/Corrective Action Program (RECAP) Guidance Document. A case study of the implementation of these guidelines in response to an underground storage tank (UST) confirmed release.

NOGS GOLF TOURNAMENT AND CRAWFISH & SHRIMP BOIL

MONDAY, APRIL 29, 2024
BEAU CHENE COUNTRY CLUB
10:00 AM SHOTGUN START

GOLF:

INDIVIDUALS - \$150

TEAM MULLIGANS - \$40

MULTI HOLE SPONSOR - \$500

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SINGLE HOLE SPONSOR - \$150

**SEAFOOD BOIL BEGINS AT
3:00 PM**

**SEAFOOD BOIL
INCLUDED IN
GOLF REGISTRATION
NOGS MEMBERS &
GUESTS \$40 PER
PERSON**



Volunteers Needed!

**Funds raised will go towards Geological
Scholarships for LSU, UNO & Tulane**



MAY 2024 MEETING

PLANNING THE ANALYTICS FOR CCUS, WASTE INJECTION AND WATER PRODUCTION/MONITORING WELLS

TODDY GUIDRY



'Non Oil and Gas Core Analysis' has moved to the forefront of our industry not only for ecological solutions but also an additional tool for enhanced production. CO2 sequestration, Water&Waste Disposal, Water Production and Monitoring Wells all require significant formation information and standard oil and gas core analysis techniques provide that info. Regulations are rightfully very strict and the analytical programs needed are very detailed and laborious. This presentation will provide an analytical outline to provide the datasets needed to obtain your 'non oil and gas' well permits!

Injectability/Extractability... Confinability... Compatibility

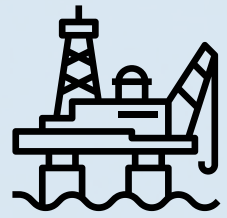
Toddy Guidry, Core Laboratories

Toddy is Sr. Technical Advisor for Core Labs and their North American SME for Reservoir Fluids, based in Lafayette La. He also oversees technical sales, support and corporate business development east of Texas. Toddy has a MS in Mathematics from the University of Louisiana at Lafayette, and has been involved in the industry for over 40 years.

WEDNESDAY, MAY 15, 2024
ZEA NORTHSORE
11:30 AM NETWORKING/12:00 NOON PROGRAM

DRILL BITS

OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES BY AL BAKER



During February 2024, the **Bureau of Safety and Environmental Enforcement (BSEE)** approved 64 Gulf of Mexico (GoM) drilling permits. Sixteen of the permits were for shelf wells, and the remaining 48 permits were for deepwater wells. There were 3 new well permits issued on the shelf and 2 new well permits issued in deepwater.

The 3 shelf new well permits were for 1 exploration well and 2 development wells. The exploration new well permit was given to **Walter Oil & Gas** for their Eugene Island 284 #1 well. The development new well permits were received by **Byron Energy** for their South Marsh Island 58 #G-9 well and by **Arena Offshore** for their Eugene Island 315 #C-4 well.

The 2 deepwater new well permits were for exploration wells. **BP Exploration & Production** was given a new well permit for their Mississippi Canyon 956 #2 well, and **Anadarko Petroleum** received a new well permit for their Mississippi Canyon 126 #10 well in Horn Mountain Field.

On February 23rd, **S&P Global Petrodata** indicated that the GoM mobile offshore rig supply stood at 48, which is 2 less than last month. The marketed rig supply consisted of 35 rigs, of which 29 were under contract. The marketed rig supply decreased by 2 from last month, whereas the contracted rig supply decreased by 1 when compared to last month. The marketed contracted versus total rig supply utilization rate stood at 72.9%, and the marketed contracted versus marketed supply utilization rate stood at 82.9%. By comparison, the February 2023 total fleet utilization rate stood at 84.4% with 32 rigs under contract out of the 45 rigs in the fleet.

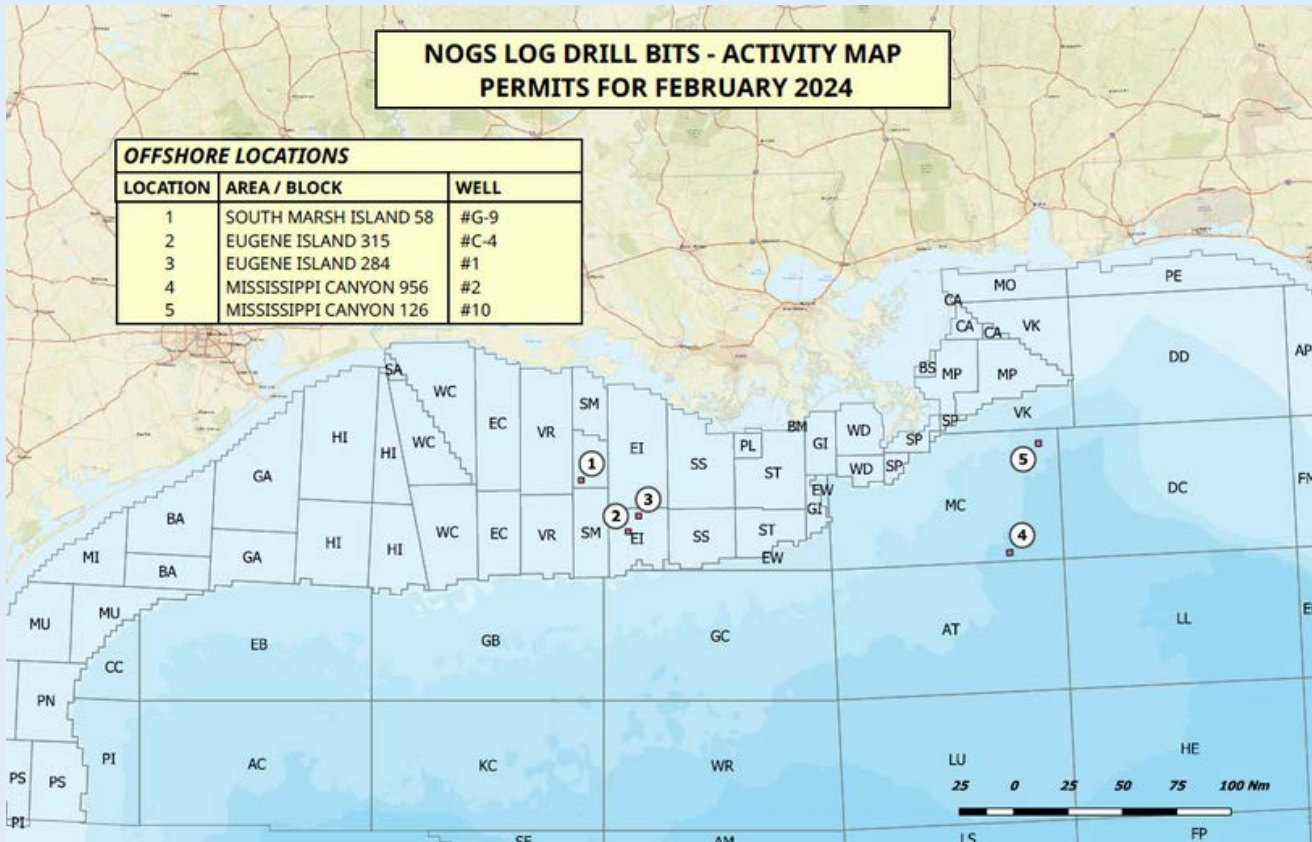
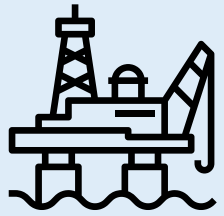
On February 23rd, **Baker Hughes** reported that there are 18 active mobile offshore rigs in the GoM, which is 1 more than last month and 62.1% of the rigs under contract mentioned above. Currently, 3 rigs are drilling on the shelf, and 15 rigs are drilling in deepwater. The shelf rigs are located in the High Island, Eugene Island and Ship Shoal Areas. The deepwater rigs include 7 rigs in the Mississippi Canyon Area, 3 rigs in the Alaminos Canyon Area, 2 rigs in the Walker Ridge Area, and 1 rig each in the East Breaks, Keathley Canyon and Garden Banks Areas.

On February 23rd, the **Baker Hughes** total U.S. rig count stood at 626 rigs, which is 5 more than reported at the end of January 2024. Of the 626 rigs, 503 (80.4%) are oil rigs and 120 (19.2%) are gas rigs. Three rigs are listed as miscellaneous. A year ago, there were 753 rigs working in the U.S. inferring that the 127 rig decline corresponds to a 16.9% decrease in rigs year over year. Nationally, Texas continues to have the largest number of rigs with 301, which is 48.1% of the total number of rigs in the U.S. Louisiana currently has a total of 45 rigs, which is the 3 more than last month. Louisiana ranks third behind New Mexico, which has 102 rigs.

As of February 29th, the **Bureau of Ocean Energy Management (BOEM)** had accepted 192 bids during the Phase 2 evaluation period for OCS Sale 261 that was held on December 20, 2023. A total of 119 bids are remaining assessment. The evaluation period runs for 90 days following the lease sale date.

DRILL BITS

NEW WELL PERMITS OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES MAP BY KEVIN TROSCLAIR



Recent Energy Headlines

February 2023 Recap

3/20/2024 - Interior Department Proposes Second Offshore Wind Sale in Gulf of Mexico - In another step by the Biden-Harris administration to support the growing momentum across America for a clean energy economy, the Department of the Interior today announced its proposal for a second offshore wind energy auction in the Gulf of Mexico. The proposed lease sale includes four areas offshore Louisiana and Texas, totaling 410,060 acres, which have the potential to power 1.2 million homes. [Read Full Article](#)

3/18/2024 - TotalEnergies to acquire CCS business from Talos Energy - TotalEnergies E&P USA Inc. has agreed to acquire Talos Low Carbon Solutions LLC—Talos Energy Inc.'s entire carbon capture and sequestration (CCS) business—for a combined total of about \$148 million, the companies said in separate releases Mar. 18. [Read Full Article](#)

3/12/2024 - LLOG gives subsea work on Gulf of Mexico oil development to ABL - ABL, part of the Oslo-listed energy consultancy ABL Group, has been hired by the U.S.-headquartered LLOG Exploration to provide marine warranty survey (MWS) services for a deepwater project in the U.S. Gulf of Mexico. [Read Full Article](#)

3/12/2024 - EIA expects low natural gas prices to continue in 2024, slightly reducing production compared with 2023 - The U.S. Energy Information Administration (EIA) expects the benchmark Henry Hub spot price to average about \$2.25 per million British thermal units (MMBtu) in 2024, a 10% decrease from 2023 and a 65% decrease from 2022. In its March Short-Term Energy Outlook (STEO), EIA forecasts that U.S. natural gas inventories will be more than 30% higher than average at the end of the winter season following relatively low winter demand. According to EIA's forecast, low natural gas prices will slightly decrease domestic natural gas production in 2024 compared with record production last year. [Read Full Article](#)

3/12/2024 - Shell considers slowing pace of carbon emissions cuts as CEO refocuses on oil and gas - Shell Plc has been considering slowing the pace of its carbon-emissions cuts as it updates its energy-transition strategy, according to people familiar with the matter. Any changes to the company's climate targets could come as soon as Thursday, when Shell is due to publish an update of its long-term plan for clean energy and greenhouse gas emissions, said the people, who asked not to be named because the information is still private. The move comes as Chief Executive Officer Wael Sawan delivers on a plan to allocate a greater portion of investments into oil and gas in order to give better returns to shareholders. [Read Full Article](#)

3/5/2024 - Talos Energy has wrapped up the acquisition of QuarterNorth Energy - Talos Energy revealed the deal to get a hold of QuarterNorth in January 2024 through a transaction, consisting of 24.8 million shares of its common stock and approximately \$965 million in cash. Following the acquisition, Talos has about 183 million shares of common stock outstanding, including around 24.4 million shares issued to the QuarterNorth shareholders as consideration. The U.S. player has appointed QuarterNorth's designee, Joseph A. Mills, to its board of directors. [Read Full Article](#)



AAPG



Calling for donations for the upcoming **AAPG Caughey-Zimmermann Energy Library**

LSU AAPG is developing a library that will provide a **wealth of valuable resources** to students. Our goal is to foster a **collaborative environment** where students can **explore** topics in petroleum geology, **empowering** them to **pursue careers** in the energy sector... ***BUT WE NEED YOUR HELP!***

How can you support us?

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ALL donors will receive **recognition** in the library!

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27th Annual Gulf of Mexico
Deepwater
Technical Symposium

GEOLOGY SEMINAR

Carbon Capture and Storage: An Industry Primer

SAVE THE DATE

August 14, 2024

Dr Tip Meckel - Gulf Coast Carbon Center,
Bureau of Economic Geology (USA)
Dr Trey Meckel - Monteverde Energy (Australia)

This one-day short course provides technical professionals, managers, and executives at various stages in their career an in-depth overview of Carbon Capture and Storage (CCS), one of the most rapidly emerging sectors in the energy industry and a critically necessary component of all credible low emissions and decarbonization scenarios and plans.

CCS is a safe, reliable, and proven method to safely and effectively remove carbon dioxide from the atmosphere. Under the right conditions, CO₂ stored in subsurface geologic formations is permanently isolated.

Many of the aspects of CCS that we will cover as topics and themes on the course will be familiar to participants with experience in oil and gas, but we will focus on how to leverage skills and experience to maximum benefit.

- CCS in the context of Net Zero and the Energy Transition
- Existing and emerging technologies to capture, transport, store, and monitor injected CO₂
- Sources of CO₂ emissions
- Distribution networks: Pipelines and flow assurance

- Characterizing and selecting potential storage sites
 - Onshore vs offshore
 - Depleted fields and saline aquifers
 - A forensic look at seal integrity
- Risk and uncertainty
- Reservoir surveillance
 - Migration
 - Measuring, monitoring, and verifying
- Permitting, Regulatory, and Policy issues
- Establishing and building successful partnerships
- Project management
- Financing, incentives and cost considerations
- Stakeholder engagement
- Critical success factors for technical and commercial viability

Course cost: \$200

The course will draw on the instructors' decades of first-hand experience on successful (and not so successful) USA and International commercial and technology research projects, including their learnings from applied case studies, a review of the status of current and planned global projects, projections for future growth, and thoughts on how to build a sustainable and rewarding career in the 21st century energy industry.

27th Annual Gulf of Mexico
Deepwater
Technical Symposium

**Stay tuned for these other
NOGS-sponsored courses!**

**Introduction to Western and Central Gulf
of Mexico Environmental Regulations**

Course cost: \$200

**Professional Geoscientist Exam (ASBOG)
Preparatory Course**

Course cost: \$125

**Observing Maturing Source Rocks on
Seismic Data**

Course cost: \$125

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**Have a great topic that you
would like to present to NOGS
Members at a Monthly
Meeting?**

**Submit your topic and
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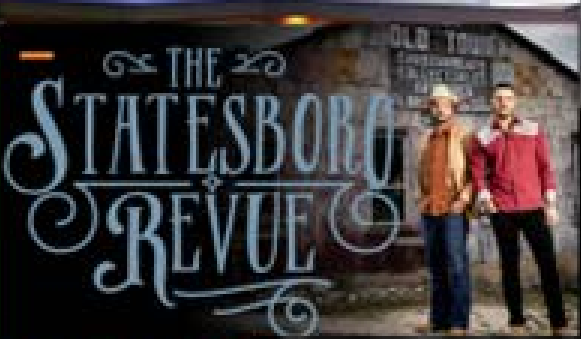
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The New Orleans Geological Society was organized on October 3, 1941, as a non-profit organization for the purpose of facilitating the development of the profession and science of Geology, with specific emphasis to exploration and production of petroleum 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.

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Founded March 14, 1978, the mission of the New Orleans Geological Society Memorial Foundation is to promote earth-science related educational or scientific purpose by granting of scholarships to outstanding Geology students at the universities in Southeast Louisiana offering a degree in Geology. Donations given in memory of Bill Craig Memorial provide for any earth science related educational or scientific purpose that is a direct benefit to grades K-12 teacher or teachers within the Greater New Orleans Area. This area encompasses New Orleans, Jefferson, Plaquemines, St. Bernard and St. Tammany Parishes.

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Thank you!

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