

N OGS LOC

JANUARY 2023

Volume 63 No. 7

Happy
New
Year
2023

On the Cover

Winter has come early to North Dakota's Bakken field. Drilling and production activities have increased in the last year due to improved commodity prices. The Bakken field produces from upper Devonian to lower Pennsylvanian Bakken and Three Forks Formations consisting of organic-rich marine shales, sandstones, and minor dolomites. The USGS estimates mean recoverable reserves of 4.3 billion barrels of oil and natural gas liquids and 4.9 TCF of natural gas from the two formations in northwestern North Dakota and northeastern Montana.



From the Editor...

Happy New Year Everyone,

The beginning of a new year brings thoughts of hope for the future and ideas for self-improvement and personal renewal. It always seems difficult to come up with the perfect New Year's resolution that you know you are likely to keep throughout the year. For you devoted NOGS members, here are a few suggestions:

- Resolve to attend at least one (preferably several) NOGS luncheons either in person or online via ZOOM,
- Resolve to participate in one of many NOGS educational events, including SuperSaurus Saturday at the Louisiana Children's Museum this Spring,
- Resolve to serve on the NOGS Board of Directors or one of many advisory committees that help our Society run smoothly,
- Resolve to participate in the annual NOGS Golf Tourney, either as a golfer or volunteer, the proceeds of which go to fund local Children's museums,
- Resolve to make a generous tax-deductible donation to the New Orleans Geological Society Memorial Foundation which helps fund our annual scholarship program for deserving college students.

Fulfilling one or more of these resolutions will be greatly appreciated by NOGS and will help our society immensely throughout the year.

Have a wonderfully prosperous New Year 2023

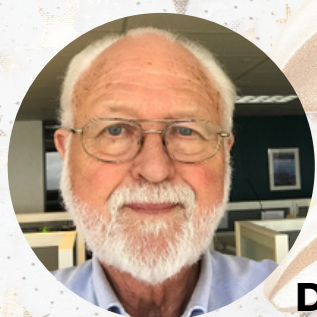


David

David Reiter

2022/2023 NOGS LOG Editor

Happy
New Year



DOUGLAS BRADFORD

A MESSAGE FROM 2022/2023 NOGS PRESIDENT

To all members and friends of the New Orleans Geologic Society:

Hopefully everyone had a good and happy holiday with family and friends. Our December in person meeting was at The Cannery in New Orleans where our speaker was Sonke Dangendorf who gave his presentation on acceleration of sea level rise on the Southeast and Louisiana Gulf coast. His talk provided a lot of information that indicated that our flooding risk is not likely to decline.

After the talk, 12 NOGS Memorial Foundation awards were presented by Robert Meltz on behalf of the NOGS Memorial Foundation, to our 2022 Scholarship Recipients from Tulane University, Louisiana State University and The University of New Orleans. The awards presented to 12 graduate and undergraduate students totaled \$30,000. We give our most sincere congratulations to all of these students for their excellent research and wish them the best on their continued academic and professional journeys. Since the Memorial Foundation was establishment in 1978, it has awarded 411 scholarships totaling \$893,500.00. UNO has received 130, LSU 127 and Tulane 124 (including the 12 that were presented at the December Luncheon).

As always, a reminder of dues renewal if you haven't already done so, \$35.00 for Regular membership and \$15 for Student membership. I encourage you to pay your dues and to give consideration to adding a special donation to the Memorial Foundation to help us continue our worthwhile local community, university, and education programs. Thanks everyone, stay safe and well!

**Best regards,
Doug Bradford
2022-2023 NOGS President**

A decorative footer featuring a dark blue background with scattered white and gold stars of various sizes. On the right side, the year '2023' is displayed in large, bold, gold-colored 3D numerals.

2023

JANUARY NOGS MEETING

MONDAY, JANUARY 9, 2023 11:30 AM

ZEAS NORTH SHORE

FINDING NEW OIL IN OLD FIELDS 7900'SD DEVELOPMENT IN THE MAIN PASS 41 FIELD



**MACHELLE JOHNSON, SENIOR
RESERVOIR ENGINEER
AND
CHRIS MURLEY, GEOSCIENTIST**

Machelle has 30 years of extensive Gulf of Mexico Exploration, Development, and Production Experience. Prior to joining Cantium in 2019, Machelle held several leadership and technical roles at Shell Energy, and Talos with most time working major Deepwater Fields in sanctioning major projects and optimizing production as the lead Subsurface Reservoir Engineer. Machelle holds a Bachelor's degree (Petroleum Engineering) from the University of Alabama.

Chris has 8 years of experience in the oil and gas industry. Before joining Cantium as a Geologist in 2019, Chris was an Asset Development Geologist for Chevron where he worked on the now Cantium owned Bay Marchand and Main Pass fields. Chris earned his Bachelors in Geology from Louisiana State University and his MS in Geology from the University of Louisiana at Lafayette.

OBJECT
Cantium acquired the Main Pass 41 Field in 2017. A new subsurface interpretation of the previously drilled reservoir resulted in one of the best producing wells in the 65-year history of MPE. As a result of the success of this well, Cantium made significant oil discovery in the equivalent sand trap to the east.

The OCS-G 01623 #7 (spud June 1999) encountered low net-to-gross channel margin facies in the western segment of the 7900'sd complex. Subsequently, the OCS-G 01623 #8 (spud January 2021) targeted, and encountered, the well-developed channel axis facies of the complex, logging 16' TVT of net reservoir full-to-base with oil. The success of the OCS-G 01623 #7ST01 de-risked the geologic model associated with the 7900'sd complex's eastern segment.

The OCS-G 01623 #8 (spud April 2022) targeted the interpreted 7900'sd channel axis of the eastern segment and encountered a thick (79' TVT net sand), well-developed (93% net-to-gross) channel sand full-to-base with hydrocarbon (43' TVT net gas on 37' TVT net oil) and logging a GOC.

The OCS-G 01623 #8 well was sidetracked downdip along the interpreted channel axis to delineate the reservoir. The OCS-G 01623 #8ST01 (spud April 2022) encountered a thick (103' TVT net sand), well-developed (96% net-to-gross) 7900'sd with 4' TVT of net oil on water.

**Click Here to Reserve
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PICTURE FROM THE PAST



From left - President "Jack" Langford presented Honorary Life Memberships to Richard W. "Dick" Boebel and M.R. "Bob" Douglass at the October 1992 Luncheon at the Petroleum Club in the Energy Center Building in the CBD. "Dick" Boebel passed away on September 1, 2007 at 81. As stated in his obituary, he "was an independent geologist and geophysicist known as much for his intelligence as for his oil finds." In 2008, the NOGS Memorial Foundation named one of its Scholarships for Boebel in recognition of his contributions to our Society and to the petroleum industry. "Bob" Douglass now resides at Lambeth House in uptown New Orleans. "Jack" Langford died on March 21, 2014 at 86 years of age.

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.

The NOGS LOG is now a digital magazine with live links to your site to reach NOGS Members and support your Society. Please contact Christy Himel admin@nogs.org for placement availability. Full page NOGS LOG advertisers will have their Company LOGO posted on the NOGS Website front page. All advertisers are included on the Society's monthly PowerPoint and listed on the website with a link to their home page. Please check out our website www.nogs.org

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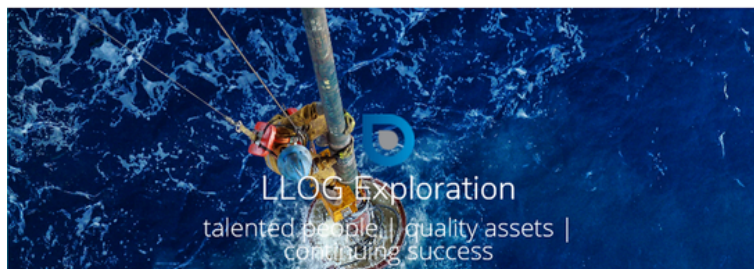
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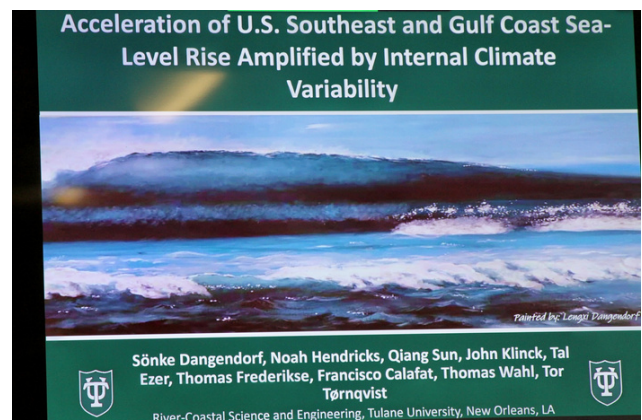
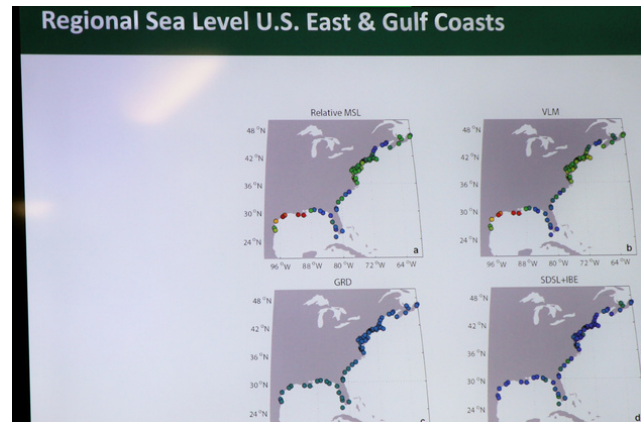
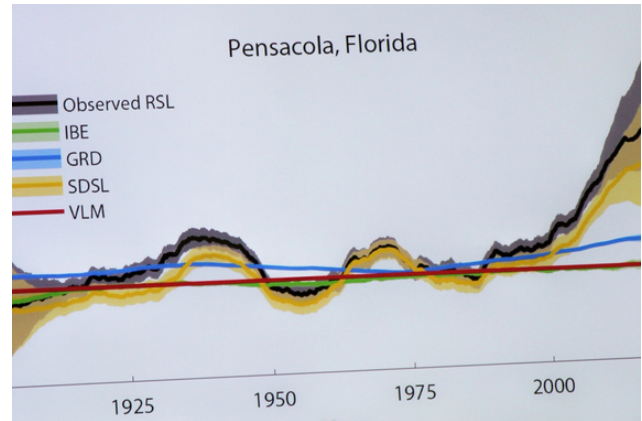
Happy New Year

DECEMBER NOGS MEETING

MONDAY, DECEMBER 5, 2022 11:30 AM
THE CANNERY NEW ORLEANS



SÖNKE DANGENDORF, PH.D.





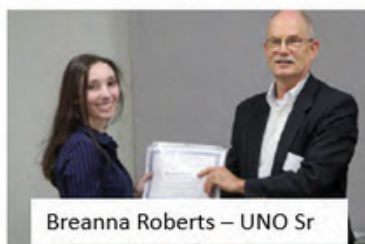
NEW ORLEANS
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2022 Scholarship Recipients



THE UNIVERSITY of
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LSU



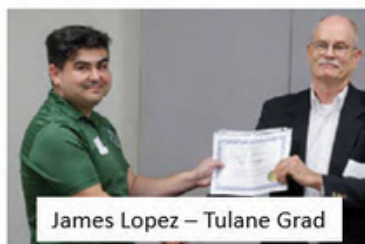
Breanna Roberts – UNO Sr



Wilke Coleman – UNO Grad



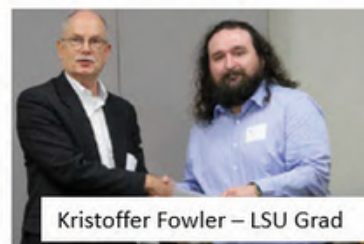
Giancarlo Portocarrero – UNO Sr



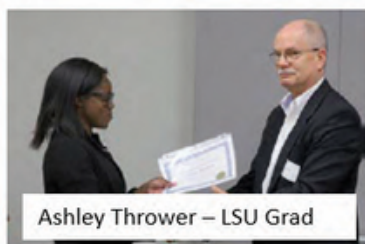
James Lopez – Tulane Grad



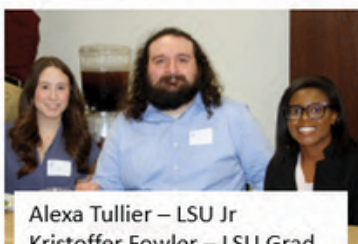
Brittany Johnson – UNO Jr



Kristoffer Fowler – LSU Grad



Ashley Thrower – LSU Grad



Alexa Tullier – LSU Jr
Kristoffer Fowler – LSU Grad
Ashley Thrower – LSU Grad



Alexa Tullier – LSU Jr

Bob Meltz, NOGS Memorial Foundation Chairman, awards annual NOGS scholarships to deserving college students.

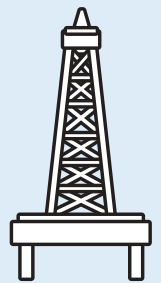


Not Pictured:

Sara Seale - LSU Senior
Shale Kennedy - Tulane Jr
Ekanshu Mallick – Tulane Grad
Carson Mack – Tulane Sr

DRILL BITS

OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES BY AL BAKER



During November 2022, the Bureau of Safety and Environmental Enforcement (BSEE) approved 52 Gulf of Mexico (GoM) drilling permits. Three of the permits were for shelf wells, and the remaining 49 permits were for deepwater wells. There were 4 new well permits issued; all are in deepwater.

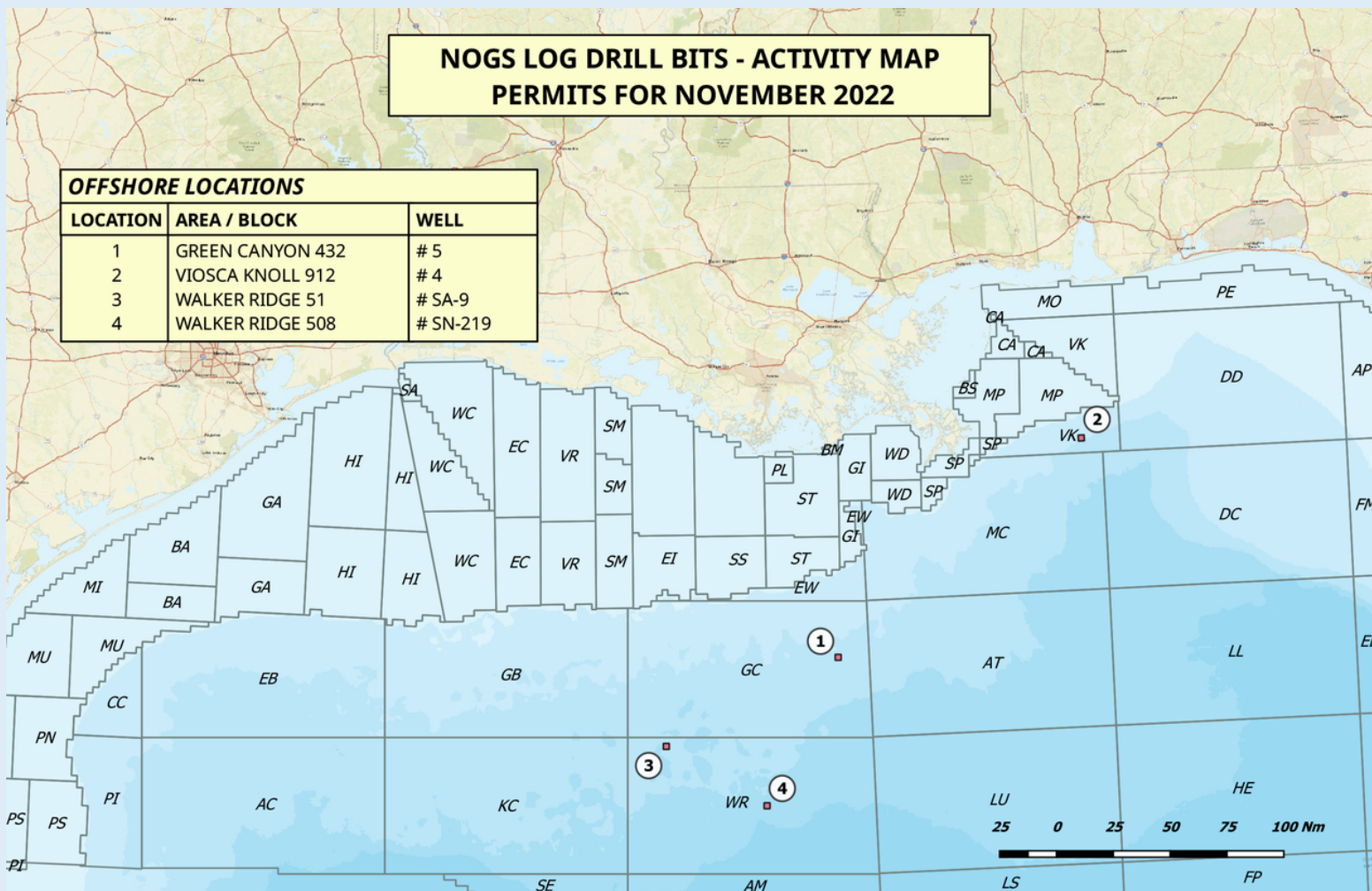
Of the 4 deepwater new well permits, 2 were for exploration wells, and 2 were for development wells. Shell Offshore received a permit for their Walker Ridge 508 #SN-219 exploration well situated within their Stone Field. Murphy Exploration & Production Company - USA was granted a permit for their Green Canyon 432 #5 exploration well in their Samurai Field. BOE Exploration & Production was awarded a permit for their Walker Ridge 51 #SA-9 development well located in their Shenandoah Field. Talos Petroleum obtained a permit for their Viosca Knoll 912 #4 development well within their Ram/Powell Field.

On November 23rd, IHS-Petrodata indicated that the GoM mobile offshore rig supply stood at 46, which is 1 less than last month. The marketed rig supply consisted of 34 rigs, of which 28 were under contract. The marketed rig supply and the contracted rig supply number were also each 1 less than last month. The marketed contracted versus total rig supply utilization rate stood at 73.9%, and the marketed contracted versus marketed supply utilization rate stood at 82.4%. By comparison, the November 2021 total fleet utilization rate stood at 69.6% with 32 rigs under contract out of the 46 rigs in the fleet.

On November 23rd, Baker Hughes reported that there are 16 active mobile offshore rigs in the GoM, which is 3 more than last month and 57.1% of the rigs under contract mentioned above. Currently, all 16 rigs are drilling in deepwater. They include 6 rigs in the Mississippi Canyon Area, 4 rigs in the Green Canyon Area, 2 rigs in the Walker Ridge Area and 1 rig each in the Garden Banks, Ewing Bank, East Breaks and Alaminos Canyon Areas.

On November 23rd, the Baker Hughes total U.S. rig count stood at 784 rigs, which is 16 more than reported at the end of October 2022. Of the 784 rigs, 627 (80%) are oil rigs and 155 (19.8%) are gas rigs. Two rigs are listed as miscellaneous. A year ago, there were 569 rigs working in the U.S. inferring that the current rig figure represents an 37.8% increase in rigs year over year. Presently, Texas continues to have the largest number of rigs with 372, which is 47.4% of the total number of rigs in the U. S. Louisiana currently has a total of 66 rigs, which is 6 more than last month. Louisiana ranks fourth behind New Mexico, which has 105 rigs, and Oklahoma, which has 70 rigs.





HAPPY
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NOGS

Happy New Year

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Founded March 14, 1978, the mission of the New Orleans Geological Society Memorial Foundation is to promote earth science related or scientific purpose by granting of scholarships to outstanding Geology students at the universities in Southeast Louisiana having a comprehensive curriculum and offering a degree in Geology. The Bill Craig Memorial Fund provides 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 is defined as the area encompassing New Orleans, Jefferson, Plaquemines, St. Bernard and St. Tammany Parishes.

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Recent Energy HeadlinesDecember 2022 Recap

12/19/2022 - China's new drillship to go to ultradeep waters in oil and gas quest - The vessel will be able to search in any waters around the globe once up and running in 2024, CCTV reports. It will also be equipped for advanced scientific missions, report says. [Read Full Article](#)

12/12/2022 - Brent could quickly top \$90/bbl on Fed pivot, China demand recovery (Bank of America) - Global oil benchmark Brent could rebound and quickly rise past \$90 per barrel on the back of a dovish pivot in the U.S. Federal Reserve's monetary policy and a "successful" economic reopening by China, Bank of America (BofA) Global Research said. Lately, oil prices have been steadily declining due to fears that a weakening global economy would slash fuel demand, setting prices on track for a second consecutive quarterly fall. [Read Full Article](#)

12/12/2022 - Arena Energy Announces Strategic Acquisition of Gulf of Mexico Shelf Properties from GOM Shelf, LLC - Arena Energy, a leading independent oil and gas exploration company focused on the Gulf of Mexico Shelf, today announced it has closed on the acquisition of seven blocks and twelve platforms in the Gulf of Mexico from GOM Shelf, LLC. The acquisition includes net daily production of approximately 2,000 barrels of oil equivalent in fields with historically low decline rates and includes a majority interest in 2 of the largest fields in the shallow water GOM in Eugene Island 330 and South Marsh 128. [Read Full Article](#)

12/10/2022 - Murphy preparing to spud GoM Oso, Tulum exploration wells - Anadarko US Offshore LLC (Oxy) and Ridgewood Energy have agreed to participate in the Oso-1EXP (Atwater Valley 138) exploration well in the US Gulf of Mexico (GoM). Anadarko US Offshore LLC (Oxy) and Ridgewood Energy have agreed to participate in the Oso-1EXP (Atwater Valley 138) exploration well in the US Gulf of Mexico. [Read Full Article](#)

12/2/2022 - Spain's Repsol to exit from two exploration blocks in Gulf of Mexico - The decision comes as the company failed to find potential prospective resources. Spain-based energy company Repsol has received approval to exit from two oil and gas exploration blocks in the Gulf of Mexico, reported Reuters, citing the Mexican oil regulator. The approval by Mexico's oil regulator body (Cnh) comes weeks after the Repsol-led consortium formally vacated from three other blocks. [Read Full Article](#)

12/2/2022 - OPEC+ to consider deeper oil output cuts ahead of Russia sanctions and proposed price cap - OPEC+, a group of 23 oil-producing nations led by Saudi Arabia and Russia, will convene on Sunday to decide on the next phase of production policy. The highly anticipated meeting comes ahead of potentially disruptive sanctions on Russian oil, weakening crude demand in China and mounting fears of a recession. [Read Full Article](#)

TOP 10 REASONS TO JOIN NOGS

1

Proclaim your professionalism

With an 80 year history and over 300 active members, NOGS is the premier professional organization for geologists in New Orleans. Adding your name to the ranks declares your pride in the profession you have chosen.

2

Advance your career

NOGS members enjoy educational opportunities and top speakers designed to increase knowledge and keep up with the newest trends in geoscience, both on the national and local levels.

3

Advertise your integrity

NOGS has a reputation of over 75 years for upholding high standards. Align yourself with like-minded geologists and related fields.

4

Further your cause

NOGS was organized for the purpose of facilitating the development of the profession and science of Geology, at the time with a focus on production of oil and gas. Since Hurricane Katrina our objectives expanded to include the dissemination of the geological facts of flood control, engineering and environmental geoscience.

5

Network with others who do what you do

Making connections, between people and ideas, is an important part of any scientific endeavor. Meet others who can help you make those connections.

6

Advocate for your profession

Serious-minded professionals know that serving the profession means responding to calls for action from those who represent the profession. NOGS monitors trends in geoscience education, regulation, and practice standards and periodically advises members on required action.

7

Serve your profession and community

Opportunities for individuals to serve on NOGS committees that work on a variety of issues from building educational programs to sharing knowledge with others to providing scholarships to young geologists in our area.

8

Don't reinvent the wheel ... use available resources

NOGS members can provide you with the resources you need to do your job well. Long-time members remain active and are happy to share their knowledge and best practices.

9

Play a part in elevating the status of geosciences.

Your membership in NOGS and your dedication to geoscience elevates the entire profession.

10

Do it for YOURSELF!

It's all about YOU! NOGS' educational, networking, and career planning programs will take you where you want to go!



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Email linda.sternbach@gmail.com for more information. Be a part of this program. Oral sessions are being organized now.

THEMES/SESSIONS

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GOM Shelf and Deepwater

Wilcox, Miocene, Plio-Pleistocene, Norphlet

Optimizing Reservoir Assets

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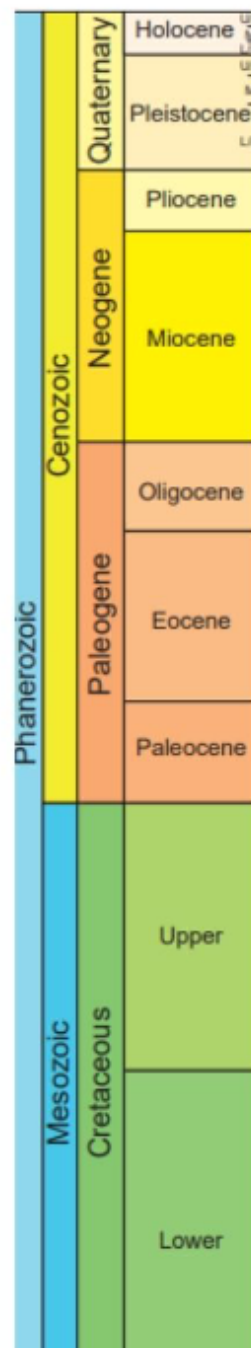
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HGS History- 100 Years

in the Gulf



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