

OCTOBER 2022
Volume 63 No. 4

NCGS LOG

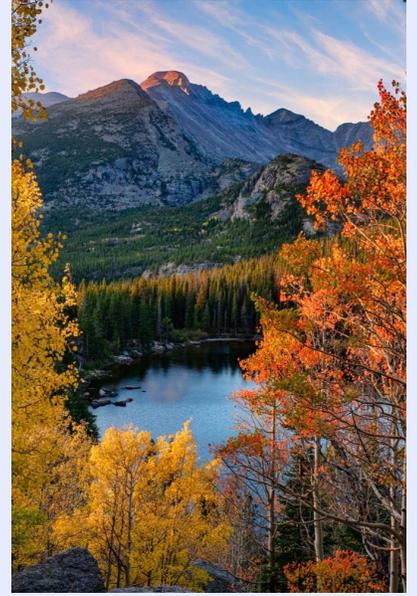


HELLO
FALL



On the Cover

Early fall colors in Colorado's Rocky Mountain National Park, one of the top 15 most visited national parks in the U.S. The majestic peaks and deep valleys have a long and complicated geologic history. The core of the mountains are composed of Precambrian Era (1600 - 1700 Mya) granites, gneisses and schists that were covered by sediments within the Cretaceous (100 Mya) Western Interior Seaway. Uplift and erosion during the Late Cretaceous - Early Tertiary Laramide Orogeny stripped off much of these sediments but were replaced by extensive ash flow volcanic deposits. Another period of uplift and erosion during the Late Tertiary as well as Holocene glacial periods carved the rugged peaks and valleys seen today. Nearly 4.5 million visitors visited Rocky Mountain National Park last year enjoying numerous scenic drives and over 350 miles of hiking trails.



From the Editor...

Hello Everyone

Now that the Fall season has begun and everyone is back to work or school, it begs the age-old question, "What did you do on your summer vacation?" I'm sure many of you journeyed far and wide to truly wondrous destinations and you probably took numerous scenic photos along the way. I'm convinced that geologists always take the best nature photos because they have a unique perspective on the underlying geologic content and the history of physical landforms. Physical manifestations of the mountains, valleys, waterfalls, beaches, and even roadcuts take on different meanings to those trained in the geologic sciences. With this in mind, if you have any favorite vacation photos that show something of geologic interest, please feel free to send them to editor@nogs.org along with a brief description and we will try to get them published in the NOGS Log (perhaps even as a cover photo for the Log).

I hope you and your families have a safe and spooktacular Halloween!



David

David Reiter

2022/2023 NOGS LOG Editor



A MESSAGE FROM 2022/2023 NOGS PRESIDENT

DOUGLAS BRADFORD

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

Our September meeting was at Zea's Rotisserie in Covington and was very well attended. The speaker was David Schneider, a reservoir engineer with LLOG Exploration, who gave a very informative presentation on "Connectivity and Completion Strategy for a Multi-well Subsea Tieback in the Deep Water Gulf of Mexico Spruance Field." The information that he presented described a number of stratigraphic, structural and engineering conditions that influenced the completion decisions that were made to bring the field onto production.

The October meeting will be held at Zea's Rotisserie in Covington. Chris McLindon will be the speaker at this meeting. The topic of Chris' presentation is entitled "Geologic Evaluation of the Mid-Barataria Diversion". The information regarding sediment diversion should be of interest to us all and be very informative with our current concerns regarding land loss. Everyone is encouraged to attend.

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**





NOGS OCTOBER NORTH SHORE MEETING

MONDAY, OCTOBER 3, 2022
11:30 AM - ZEA'S ROTISSERIE
110 LAKE DRIVE, COVINGTON, LA

GEOLOGICAL EVALUATION OF THE VICINITY OF THE MID- BARATARIA SEDIMENT DIVERSION



Presented by:
Chris McLindon

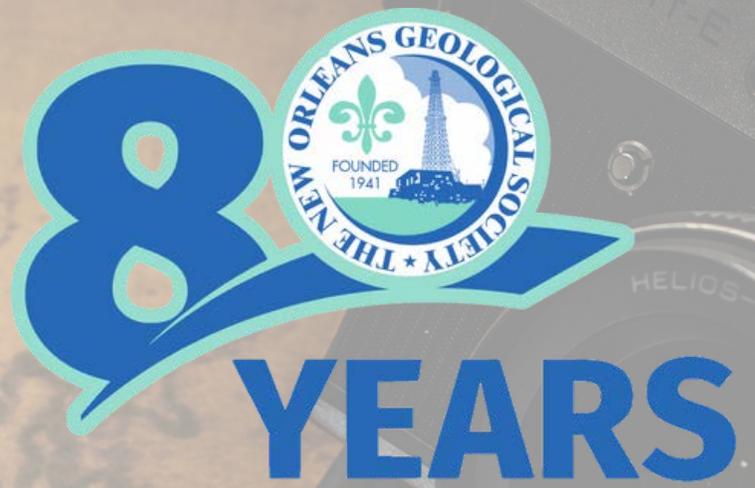
ABSTRACT: The U.S. Army Corps of Engineers released the Final Environmental Impact Statement (EIS) for the Mid-Barataria Sediment Diversion on September 19th. Permits to begin construction could be issued by the end of the year. An evaluation of the geology of the vicinity of the diversion project shows that several critical technical parameters were either not considered or were not accurately modeled in the EIS. This geological evaluation considers 1) the premise that the diversion mimics natural processes, 2) the properties and potential impacts of the Ironton fault, which crosses the conveyance structure, 3) an estimation of the acceleration of subsidence rates caused by sediment deposition from the diversion and its potential impacts, 4) the impacts of erosion caused by flow velocities in the outflow area of the diversion, and 5) the impacts of flooding saline and brackish marshes with river water.

This evaluation will consider a reconstruction of historical deltas of the Mississippi River and the relationship between land building and the delta cycle. It will evaluate the history of fault-slip movement on the Ironton fault based on properties of the fault and analogous faults along the river and within the Terrebonne Linked Tectonic System. A range of potential values for the frequency and magnitude of slip events on the Ironton fault will be considered. Estimations of potential subsidence rates in the vicinity of the diversion will be considered based on comparisons with analogous areas underlain by thick layers of highly organic soils. Estimations of the volume of sediment removed by erosion due to flow velocity will be presented. This includes over 100 million tons of carbon, much of which will be oxidized and released to the atmosphere as CO₂.

BIO: Chris McLindon was employed an exploration geologist in the oil and gas industry between 1980 and 2020. He received a B.S. in Geology from L.S.U. in 1979. Chris has worked for several companies in the New Orleans area including Stone Energy, McMoRan Exploration, and Helis Oil, as well as being self-employed for several years. Chris is currently the manager/member of McLindon Geosciences, LLC in Mandeville, LA. He is a past-president of the New Orleans Geological Society and a member of the Geological Society of America, the American Geophysical Union, and the Society of Independent Professional Earth Scientists. Chris was named to an oversight position for the Louisiana Coastal Geohazards Atlas Project by Dr. Charles Groat of the Louisiana Geological Survey in 2018. In that same year he was the recipient of the Gulf Coast Association of Geological Societies Statesmanship Award in recognition of work associated with the atlas project.

[Register Today - www.nogs.org](http://www.nogs.org)

PICTURE FROM THE PAST



**Super Science Saturday, April 15, 2017 – Overview at the old
Louisiana Children’s Museum on Julia Street**

*Submitted by
Ed Picou, Chairman - Historical Committee*

advertising rates

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

CURRENT AD RATES

Full Page 7.5" x 10" \$1,750

Half Page 3.75" x 10" or 7.5" x 5" \$925

Quarter Page 3.75" x 5" or 7.5" x 2.5" \$500

Eighth Page 3.75" x 2.5" \$300

Twelfth Page 3.75" x 1.65" \$188

Note Size 3.75" x 0.75" \$60

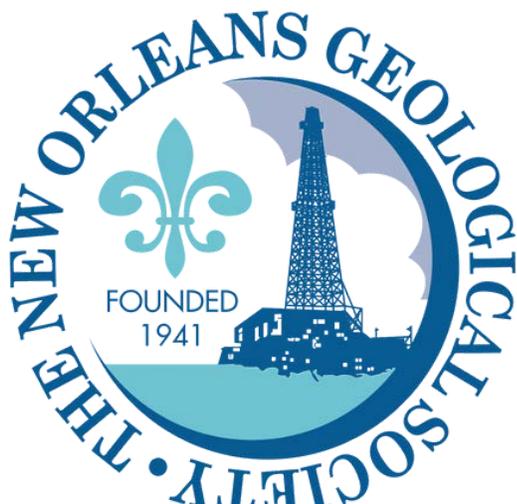
Premium Locations Inside Front Cover +30%

Opposite President's Page +20%

Opposite Oral Abstract +20%

Inside Back Cover +30%

Outside Back Cover +40%



LLOG
exploration



Covington Office

1001 Ochsner Blvd., Suite 200

Covington, Louisiana 70433

p: 985.801.4300

f: 985.801.4796

Houston Office

CityCentre Three

842 W Sam Houston Pkwy N

Suite 600

Houston, Texas 77024

p: 281.752.1100

f: 281.752.1199

Scott Office

814 S. Frontage Rd.

Scott, LA 70583

p: 337.408.4000

f: 337.408.4049

www.llog.com

**ROCK SOLID
SERVICE**



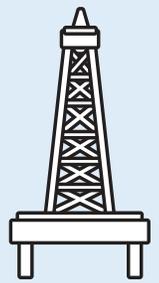
© 2013 Core Laboratories.
All rights reserved.



Core Lab
RESERVOIR OPTIMIZATION
www.corelab.com
337-837-8616

DRILL BITS

OFFSHORE GULF OF MEXICO SHELF AND
DEEPWATER ACTIVITIES
BY AL BAKER



During August 2022, the Bureau of Ocean Energy Management (BOEM) approved 84 Gulf of Mexico (GoM) drilling permits. Twelve of the permits were for shelf wells, and the remaining 72 permits were for deepwater wells. There were 3 new well permits issued in deepwater.

The three deepwater new well permits were for exploration wells. Chevron U.S.A. received a permit for their Green Canyon 807 #AP-4 well located in their Anchor Field. Eni US Operating Co. obtained a permit for their Mississippi Canyon 728 #4 well, and LLOG Exploration Offshore was given a permit for their Mississippi Canyon 814 #2 well.

On August 26th, IHS-Petrodata indicated that the GoM mobile offshore rig supply stood at 46, which is the same as last month. The marketed rig supply consisted of 34 rigs, of which 27 were under contract. The marketed rig supply was the same as last month, and the contracted rig supply number was 1 less than last month. The marketed contracted versus total rig supply utilization rate stood at 58.7%, and the marketed contracted versus marketed supply utilization rate stood at 79.4%. By comparison, the August 2021 total fleet utilization rate stood at 25.6% with 21 rigs under contract out of the 52 rigs in the fleet.

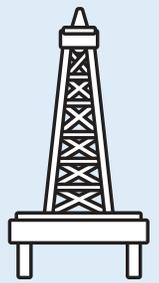
On August 26th, Baker Hughes reported that there are 16 active mobile offshore rigs in the GoM, which is 1 more than last month and 59.3% of the rigs under contract noted above. Currently, all 16 rigs are drilling in deepwater. They include 8 rigs in the Mississippi Canyon Area, 5 rigs in the Green Canyon Area and 1 rig each in the Garden Banks, Walker Ridge and Keathley Canton Areas.

On August 26th, the Baker Hughes total U.S. rig count stood at 765 rigs, which are 2 less rigs than reported at the end of July 2022. Of the 765 rigs, 605 (79.1%) are oil rigs and 158 (20.7%) are gas rigs. Two rigs are listed as miscellaneous. A year ago, there were 508 rigs working in the U.S. inferring that the current rig figure represents an 50.6% increase in rigs year over year. Presently, Texas continues to have the largest number of rigs with 371, which is 48.5% of the total number of rigs in the U. S. Louisiana currently has a total of 65 rigs, which is the same last month. Louisiana is tied with Oklahoma for third place-ranking. New Mexico ranks second with 110 rigs.

On August 2nd, Hess announced that it had made an oil discovery on their Huron Prospect in Green Canyon Block 69. Their well reached a total depth of 28,900 feet and found high quality, oil-bearing Miocene-aged reservoirs. Following evaluation of the discovery well, an appraisal sidetrack is planned.

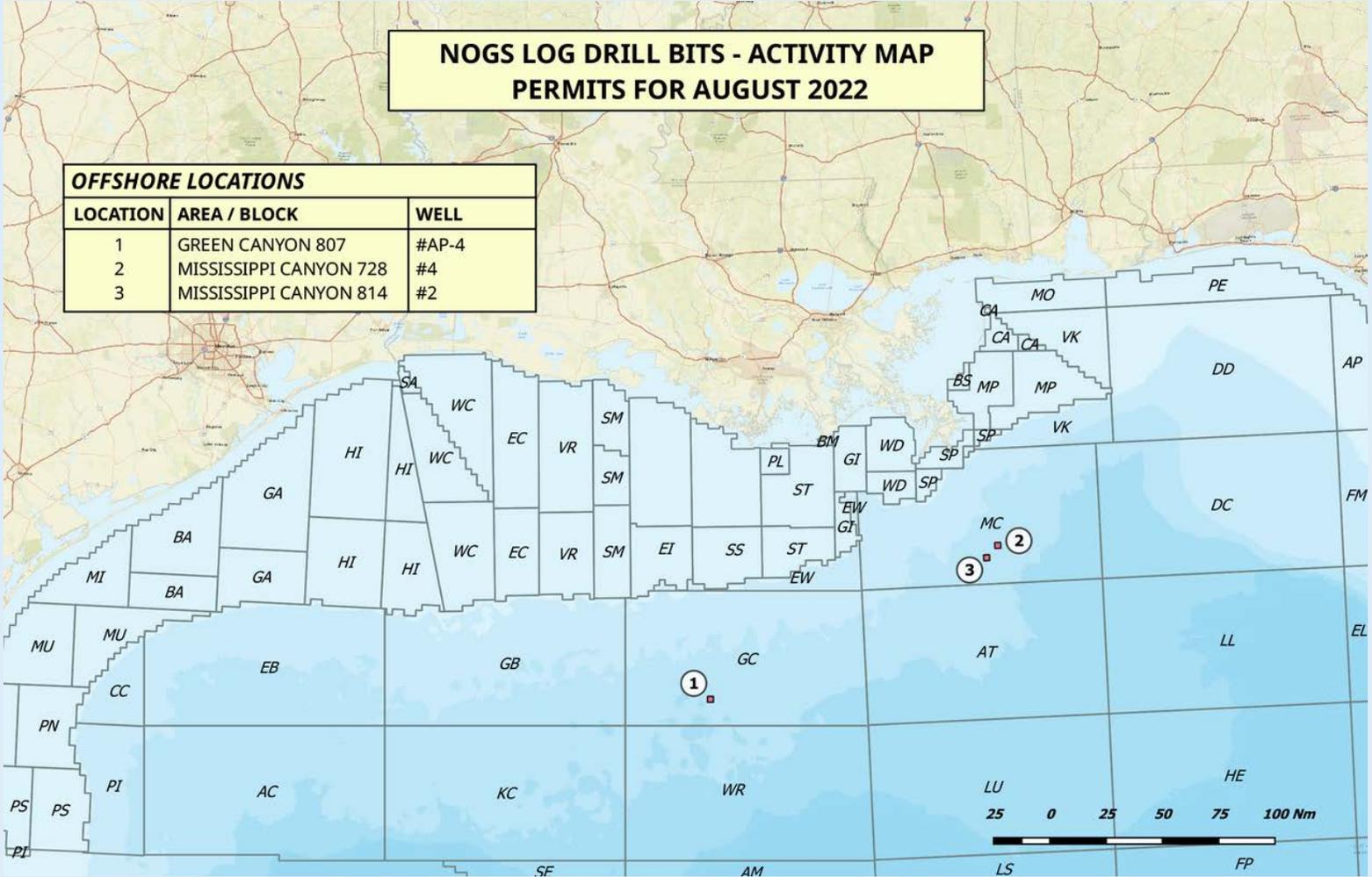
DRILL BITS

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



NOGS LOG DRILL BITS - ACTIVITY MAP PERMITS FOR AUGUST 2022

| OFFSHORE LOCATIONS | | |
|--------------------|------------------------|-------|
| LOCATION | AREA / BLOCK | WELL |
| 1 | GREEN CANYON 807 | #AP-4 |
| 2 | MISSISSIPPI CANYON 728 | #4 |
| 3 | MISSISSIPPI CANYON 814 | #2 |





NOGS SEPTEMBER NORTH SHORE MEETING

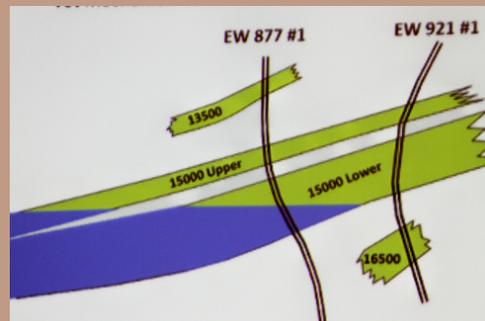
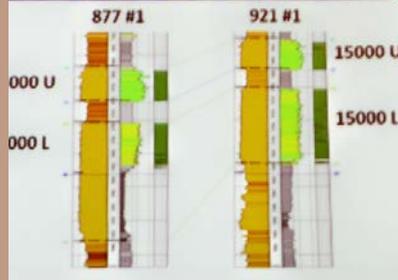
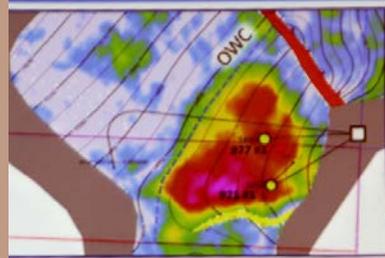
CONNECTIVITY AND COMPLETION STRATEGY FOR A MULTI-WELL SUBSEA TIEBACK IN THE DEEP WATER SPRUANCE FIELD



*Presented by:
David Schneider*



Connectivity Conclusio



NOGS



D-O-R ENGINEERING, INC.

Reservoir Engineering - 3-D and Geoscience Services

6161 Perkins Rd.
P.O. Box 80812



Bus: (225) 765-1914
Baton Rouge, LA 70898

Thomas L. Davis
Geologist



+35 Years exploration & development
experience in the western US,
overseas and offshore.

Tel: 818-429-4278 tdavisgeo@gmail.com
www.thomasldavisgeologist.com

Prospects, data and field assessments available. Lots of free petroleum geology info at the website.

EDWARD B. PICOU, JR.
Shell - Retired
504-975-3096

PHOTOGRAPHY BY ARTHUR

Arthur F. Christensen

arthur_shalimar@yahoo.com

985-893-2013



LaBay
Exploration Co., L.L.C.

4 Autumn Lane, Mandeville LA
(985) 264-3700



GEM Consulting, LTD

Emmitt Lockard
emlockard@yahoo.com

Michael Louis Merritt
admin@gemconsultingltd.com

Webosite

VISIT NOGS

WWW.NOGS.ORG





NEW ORLEANS
GEOLOGICAL SOCIETY
MEMORIAL
FOUNDATION INC.

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.

THE MEMORIAL FOUNDATION IS AN IRS TAX EXEMPT CODE #501(C)(3) ORGANIZATION. THE FEDERAL ID IS 72-1220999. PLEASE CONSIDER MAKING A DONATION TO THE FOUNDATION. YOUR INDIVIDUAL SUPPORT IN ANY AMOUNT WILL HELP MEET THE IRS GUIDELINES FOR OUR FOUNDATION. THANKS!

\$10,000

Gibbet Hill Foundation - In Memory of Steve & Marion Millendorf, William J. Prutzman, Roger G. Vincent, Ron Youngblood, Uno Numella and Dr. Robert T. Sellars, Jr.

Thank you!
TO OUR DONORS



\$250-\$999

Edward B. Picou - In Memory of Robert "Bob" Branson, Thomas Klekamp, Donald Andrews, William Furlong, Duncan Goldthwaite, John D. Silvernail, Beverly Christina, Carlo C. Christina, Paul C. Perrett, Sr., Emmett C. Guderian, Jr, Anthony Catalanotto, Sr., Joseph E. Boudreaux and Jackie D. Stewart

Al Melillo

Charles & Trudy Corona - In Memory of Beverly Christina

Hilary Brook

Thomas Bergeon In Memory of Art Johnson

Paul Jurik In Memory of John Silvernail

William Whiting

\$1,000

Chevron Your Cause
Shell Oil Company

UP TO \$249

Robert Rooney

Jeffrey Pollard - In Memory of Duncan Goldthwaite

Nancye Dawers - In Memory of Duncan Goldthwaite

Arthur Christensen- In Memory of Tom Klekamp

Fran Wiseman - In Memory of Steve Widdicombe, Bill Ward

Scott Gilreath - In Memory of Al Gilreath

- | | |
|-----------------|-------------------|
| Richard Olsen | David Balcer |
| Michael Duhon | Michael Gallagher |
| John Gambil | Harold Harper |
| Jeff Jandegian | David Lynch |
| James McCarthy | Peggy Rogers |
| Monte Shalett | Nancy Shepard |
| Jeff Spencer | Candace Strahan |
| Susan Waters | Thomas Watson |
| James Yeldell | Stephanie Martin |
| Chuyler Freeman | Monte Shallet |
| William Pierce | Edward Washburn |
| Michael Fein | David Cope |
| Kenneth Huffman | Louis Willhoit |

Recent Energy HeadlinesSeptember 2022 Recap

9/22/2022 - Talos to Buy Gulf of Mexico Oil Producer EnVen in \$1.1 Billion Deal - Talos Energy Inc said on Thursday it will buy EnVen Energy Corp, a private producer in the deepwater U.S. Gulf of Mexico, in a \$1.1 billion deal including debt. The acquisition will add 24,000 barrels of oil equivalent per day of production for Talos. [Read Full Article](#)

9/19/2022 - Gulf of Mexico oil driller QuarterNorth explores sale - QuarterNorth Energy is exploring a potential sale that could value the oil and gas producer in the deepwater US Gulf of Mexico at more than \$2 billion, including debt. [Read Full Article](#)

9/13/2022 - TGS Starts Amendment Phase II In U.S. Gulf Of Mexico - Energy data and intelligence provider, TGS, will continue its ultra-long offset ocean-bottom node (OBN) acquisition in the U.S. Gulf of Mexico. The Amendment Phase II extends the first phase of the survey that was acquired to the east in 2018. [Read Full Article](#)

9/13/2022 - BOEM reinstates Gulf of Mexico Lease Sale 257 leases - In compliance with congressional direction in the Inflation Reduction Act, the Bureau of Ocean Energy Management (BOEM) has accepted 307 highest valid bids from Lease Sale 257 in the Gulf of Mexico, totaling \$189,888,271. BOEM originally held the lease sale in November 2021; a federal judge invalidated the results in February of this year. Leases resulting from this sale include stipulations to protect biologically sensitive resources, mitigate potential adverse effects on protected species, and avoid potential ocean user conflicts. [Read Full Article](#)

9/9/2022 - Shell Brings Online U.S. Gulf of Mexico Well, Hess Says - U.S. oil and gas firm Hess Corp says first oil began flowing last month from a Shell-operated Llano-6 well in the U.S. Gulf of Mexico, a project for which it owns a 50% stake. Hess, best known for its 30% interest in the Exxon Mobil-operated Guyana offshore oil and gas development, also said supply chain problems have surfaced in the offshore oil and gas sector. [Read Full Article](#)

9/7/2022 - W&T Offshore to refinance debt, pursue new Gulf of Mexico deals - Oil and gas producer W&T Offshore (WTI.N) aims to refinance notes due in late 2023 using some of the proceeds from closing profitable hedges, Chief Executive Tracy Krohn said on Wednesday. The company also plans to pursue new properties in the U.S. Gulf of Mexico where it has operated for 40 years as it trims debt and builds cash reserves, Krohn said at the Barclays CEO Energy-Power Conference. [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

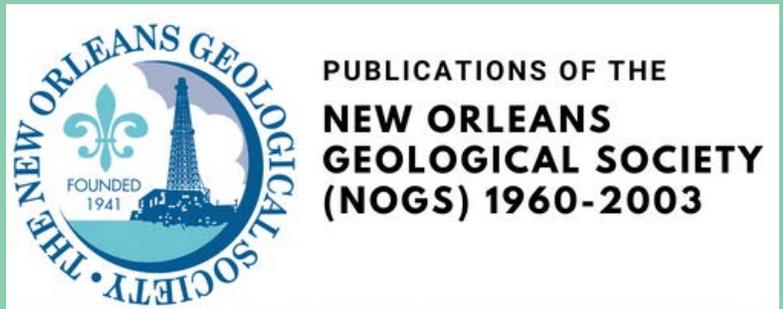
Do it for YOURSELF!

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



Help Support NOGS!

Spread the word
about these
resources available



NEW ORLEANS GEOLOGICAL
SOCIETY

**OIL & GAS FIELDS OF
SOUTH LOUISIANA**



To purchase
these publications,
go to the NOGS
website at
www.NOGS.org
Click the
“NOGS Store” link
at the top

More NOGS Store Items Coming Soon!

Stay Tuned!

CALL FOR PAPERS



GEOGULF 23

HOUSTON

Be There!

APRIL 23-25, 2023
NORRIS CONFERENCE CENTER

**SUBMIT A TALK OR POSTER ABSTRACT
DEADLINE: DECEMBER 15, 2022**

Themes include Gulf Coast Exploration and Production, Onshore and Offshore, Mexico and Caribbean, Geoscience Research, and Exploring the Future of Geoscience in the GOM.

www.geogulf2023.org

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