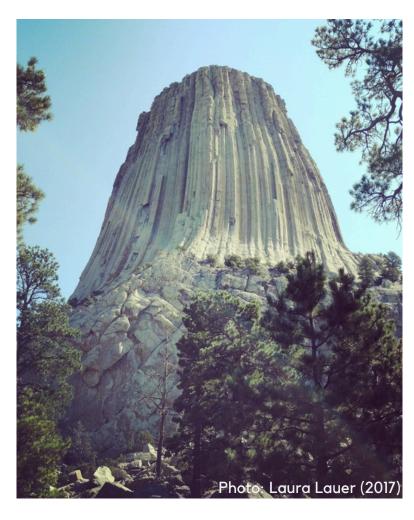


IN THIS ISSUE

On the Cover

Devil's Tower National Monument

Devil's Tower National Monument in Northeastern Colorado, USA. The first United States National Monument dedicated on September 24, 1906. The tower stands 5,112 feet above sea level and is 867 feet from base to summit. This 40-million-year-old intrusion is composed of igneous phonolite porphyry and is the largest example of columnar jointing in the world. Geologists agree that the tower was formed by magmatic intrusion and subsequent cooling, however, the process by which the magma was intruded and its relationship to the surrounding geology remains a subject of debate. It's ironic that the answers were probably eroded to expose the tower.



This iconic geologic structure is widely recognized from the 1977 film "Close Encounters of the Third Kind" in which it was a featured filming location. The parallel cracks forming the hexagonal columnar joints in Devil's Tower makes the formation "one of the finest traditional crack climbing areas in North America", according to the National Park Service. Unfortunately, as recently as September of this year a 21-year-old man fell to his death attempting the climb.

References: National Park Service

IN THIS ISSUE

From the Editor...

Hello again,

In this issue of the NOGS Log

The New Orleans Geological Society will be very active this October, starting with the South Shore Kick-off Party and Membership drive to be held October 3rd at Wrong Iron in Mid-City. Pictures from the Pat's Rest Awhile North Shore Kick-off Party are included in this issue. Take a look and come join us at Wrong Iron!

In the article entitled "Changing Times" Carol Avery (NOGS Director) describes recent modifications to NOGS Student and Active Member application forms to eliminate any ambiguity and align the wording of geoscience degrees with the local universities. It is our intention to communicate to students and earth/environmental science professionals that they are qualified and are welcome to membership in the New Orleans Geological Society

The monthly luncheon and technical presentations will be held on Wednesday, October 9th at Drago's Seafood Restaurant in Metairie; a new, and hopefully somewhat permanent location. This month Bob Meltz will present "The Wilcox in the Northern Deepwater Gulf of Mexico - Past, Present and Future". Come join us for a delicious lunch and engaging conversation!

Volunteers are still needed for: Girl Scouts "BIG believe in Girls" event on the campus of Nicholls State University, Thibodeaux, LA on Saturday, October 12th. from 9 am -2:30 pm. NOGS will display a set of stations that describe how oil fields form, providing the girls with an overview of some careers in the geological sciences. This major Girl Scout event will showcase over 30 STEM (Science, Technology, Engineering and Math) careers to 1500(+/-) girls and their scout leaders. Contact Tom Bergeon (tombergeon.geo@gmail.com) to volunteer and for travel arrangements. If you can't make the "BIG believe in Girls" event, we are also looking for volunteers on Saturday October 19th when NOGS will host "Super Saurus Saturday" at the Louisiana Children's Museum in city park. Please contact Tom Bergeon to take advantage of these volunteer opportunities.

(Brian Bothner

NOGS members are invited to the SPE DELTA (Society of Petroleum Engineers) October meeting to be held at LLOG's North Shore office October 10th. Jon Woods VP Deepwater Projects at LLOG will present an overview of the Buckskin Field development plan. Attendance is free.

I encourage professionals, academics, and graduate students to grow your network and share your research. Become an active NOGS Member, consider writing a short article in the NOGS LOG or, better yet, provide a short lunchtime presentation at a monthly meeting. Volunteer to work NOGS events or offer your services as a Board Member.

Brian Bothner 2024/2025 NOGS Log Editor

Until November....



IARED BULLOCK

A MESSAGE FROM THE 2024/2025 NOGS PRESIDENT

Hello NOGS LOG audience,

The New Orleans Geological Society is in full swing with our fall events. It would only be right for us living on the Gulf Coast to work around hurricane season. Our September luncheon was pushed back a week due to Hurricane Francine, but I applaud our attendees in being flexible as the in-person attendance was great for our first fall luncheon!

We will be meeting at Drago's Metairie for our next luncheon scheduled for Wednesday, October 9th. Our October luncheon speaker will be Bob Meltz (Retired Chevron) presenting on "The Wilcox in the Northern Deepwater Gulf of Mexico – Past, Present, & Future". As with all of our luncheons, there will be time for networking at 11:30am & the meeting officially starts at 12pm with announcements followed by a presentation.

I hope this isn't much of a spoiler for Bob's talk, and maybe it can be viewed as a teaser. Chevron achieved first oil in August 2024 at their Anchor Field in Green Canyon. This is a significant milestone for the industry in the deepwater Gulf of Mexico as Anchor is utilizing HTHP (high temperature high pressure) technology to produce from Wilcox reservoirs. nchor marks the first deepwater Gulf of Mexico development to produce from reservoirs that have pressures above 20k psi. We look forward to hearing more about this at Bob's talk.

NOGS held its first of two fall kickoff socials at Pat's Rest-a-while on the Mandeville Lakefront on Thursday, September 19th. The event was well attended, and by the looks of it, everyone passed a good time! NOGS will be having its second fall kickoff social event on Thursday, October 3rd at Wrong Iron in Mid City New Orleans. Members, family, friends, and prospective NOGS members are all welcome at the socials. Thank you Leaaf Environmental and Stratigraph for sponsoring the events!

There are two volunteer opportunities happening in October. On Saturday, October 12th the Girl Scouts of Louisiana East is having their "Believe in Girls" event on campus at Nicholls State in Thibodeaux, LA from 9:00am – 2:30pm. The event will give ~1500 girls the exposure to over 30 STEM related careers, and NOGS will have an interactive booth there showing "How an Oil Field Forms". On Saturday, October 19th NOGS will be setup at the Louisiana Children's Museum in City Park for "Super Saurus Saturday" from 11:00am – 3:00pm. Kids get to learn all about dinosaurs with plenty of fossils on display! Contact Tom Bergeon (tombergeon.geo@gmail.com) if interested in volunteering.

Please don't forget to mark your calendar and register for the 2024 NOGS Holiday Party at Rock-n-Bowl on Saturday, November 2nd from 1:30-4pm. Registration includes bowling, food, and open bar. All kids 18 and under can attend for free. This event is a family-friendly event that is open to all. Members, please bring your family, friends, and prospective members!





THURSDAY, OCTOBER 3, 2024



ON THE GREENWAY

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MEMBERS/GUESTS: \$20 (INCLUDES 2 DRINK TICKETS)
NEW MEMBERS: FREE WITH 1ST YEARS DUES

MEMBERSHIP DUES -ACTIVE & ASSOCIATES - \$35/YEAR

STUDENTS: FREE 1ST YEAR SPONSORED BY SOCIETY \$15.00 RENEWAL



The Changing Times

Carol Avery

Recently, I was wondering what we could do to increase interest in NOGS membership among students at our local universities, specifically UNO and Tulane. I noticed that what I assumed was the *Department of Geology* was now the *Department of Earth and Environmental Sciences* at both UNO and Tulane. Degree names have also followed suit. Tulane quit offering a bachelor's degree in Geology, specifically, in the fall of 2023. Both universities offer a bachelor's and master's degree in Earth and Environmental Sciences.



Our NOGS applications are online at NOGS.org under the "Join" button. At both the Active and Student levels, we have listed that "....a degree in Geology or Geophysics...." is required for membership. I proposed to the Board that we update our applications to eliminate any ambiguity and align the wording of geoscience degrees with the local universities. As such, we plan to update our student application to read:

"Persons enrolled as full time students majoring in Geology, Geophysics or Earth and Environmental Sciences at accredited colleges or universities shall qualify for Student Membership in the New Orleans Geological Society."

The application for Active membership will also be updated to incorporate these changes.

These updates are more reflective of the degrees offered at our local universities, as well as, with others nationwide. It is our intention to communicate to students and professional practitioners of the earth and environmental sciences that they are qualified and are welcome to membership in the New Orleans Geological Society. Staying aligned and up to date with local universities is imperative. In addition, these changes are in line with NOGS stated purpose to include "environmental geoscience", and dispel the notion that the organization is exclusively dedicated to oil and gas exploration. Geology, after all, includes not just what's IN the earth but also what is ON the earth.

Carol Avery NOGS Director

NOGS Monthly Meeting October 9, 2024

Drago's Metairie

11:30 a.m - Networking 12:00 p.m. Lunch & Presentation



THE WILCOX IN THE NORTHERN DEEPWATER GULF OF MEXICO - PAST, PRESENT AND FUTURE

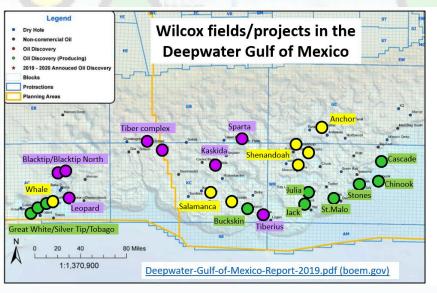
Sparta

This presentation will discuss how successful the Wilcox, or Lower Tertiary, has been since the initial BAHA #2 well was drilled in the Perdido Fold Belt in 2001. We will look at early projections about the Wilcox, the overall exploration success and how well the Wilcox footprint has been tested, over 13 years of production from existing fields, the attractive queue of near-term projects, and future exploration and production projections.



Bob Meltz

Bob Meltz retired in 2020 after 38 years in the oil industry working as a petroleum geologist first for Texaco and then for Chevron. He spent his entire career working exploration and development in the U. S. onshore and offshore Gulf Coast basins. He earned a bachelor's degree in geology from the University of Wisconsin at Oshkosh in 1980 and a Master's degree in geology from Northern Illinois University in 1982.









JOIN US TO KICK OFF THE HOLIDAY SEASON

SATURDAY, NOVEMBER 2, 2024 ROCK N BOWL

3016 S CARROLLTON AVE NEW ORLEANS, LA 70118

1:30 pm - 4:00 pm

\$35.00 per person
includes bowling (optional)
food, beer, wine & softdrinks

18 & under accompanied by parent free

Raftle Prizes

Kids, family & friends are all welcome!

Proceeds will benefit the **NOGS Memorial Foundation**

NOGS Monthly Meeting

November 6, 2024

Zea's Northshore

11:30 a.m - Networking 12:00 p.m. Lunch & Presentation



UPPER CRETACEOUS EROSIONAL FEATURES IN THE SUBSURFACE OF LOUISIANA AND MISSISSIPPI



Presented by: Paul Lawless

Regional Upper Cretaceous mapping has shown two incisions cutting down into the Upper Cretaceous of Louisiana and Mississippi imprinted on a larger unconformity at the top of the Cretaceous. The first incision, the Pearl Basin Embayment is a rectangular section missing landward and parallel to the Upper Cretaceous Shelf Margin in Southeast Louisiana and Southern Mississippi. Upwards of 1,000'+ of the UK section is missing down into the Ector Chalk Member of the Austin Group. Microfossil analysis of cuttings in the HELIS #1 Poitevent (34-T7S-R12E) St Tammany Parish, LA, shows the upper 300' of the 420' of chalk section to be Paleogene Danian in age and not entirely Cretaceous as previously assumed. In addition, Danian chalk samples appear to have been deposited as a "jumbled mess" with Pg Danian section intermixed with Cretaceous fauna. This Pg chalk likely correlates with the updip Clayton Fm. The second incision, named the Mississippi Delta Incision (MDI), lies in the western most counties of Mississippi in the Delta and the east-central parishes in Louisiana. The MDI is perpendicular to the Upper Cretaceous Shelf Margin. As much as 1,250' of the UK section is missing down into the shales correlative to the updip Tokio Fm or the upper Austin Group. The MDI trend appears to go between the huge Monroe Uplift and the much smaller Jackson Dome. Kinsland (2016, 2021) published an interpretation of the JUSTISS #2 LA Central IPNH full core (2-T9N-R2E) LaSalle Pr, La. JUSTISS cored the Pg-K boundary in a similar section of the HELIS St Tammany Parish well. Initial paleontologic analysis of the JUSTISS core samples indicate that the LaSalle Pr section has Paleogene Danian chalk over a "jumbled mess" of Danian-Cretaceous section like the HELIS St Tammany Parish well.





2024/2025 NOGS BOARD OF DIRECTORS





















New Orleans Geological Society September Meeting



Eric Zimmermann

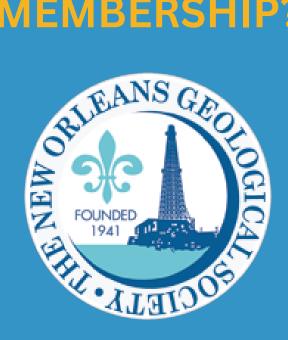
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DRILL BITS



OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES BY AL BAKER

During August 2024, the Bureau of Safety and Environmental Enforcement (BSEE) approved 74 Gulf of Mexico (GoM) drilling permits. Six of the permits were for a shelf wells, and the remaining 68 permits were for deepwater wells. There were 4 new well permit issued in deepwater.

The 4 deepwater new well permits were for 2 exploration wells and 2 development wells. Anadarko Petroleum (Occidental) received a new well permit for their Green Canyon 562 #9 exploration well in K2 Field and a permit for their Mississippi Canyon 127 #C-2 development well in Horn Mountain Field. BP Exploration & Production obtained a permit for their Green Canyon 825 #17 development well in Mad Dog Field. Chevron U.S.A. was given a permit for their Walker Ridge 759 #PS-13 exploration well.

On August 30th, S&P Global Petrodata indicated that the GoM mobile offshore rig supply stood at 48, which is the same as last month. The marketed rig supply consisted of 35 rigs, of which 26 were under contract. The marketed rig supply was also the same as last month, and the contracted rig supply was 1 less than last month. The marketed contracted versus total rig supply utilization rate stood at 54.2%, and the marketed contracted versus marketed supply utilization rate stood at 74.3%. By comparison, the August 2023 total fleet utilization rate stood at 82.9% with 35 rigs in the marketed supply out of the 48 rigs in the fleet.

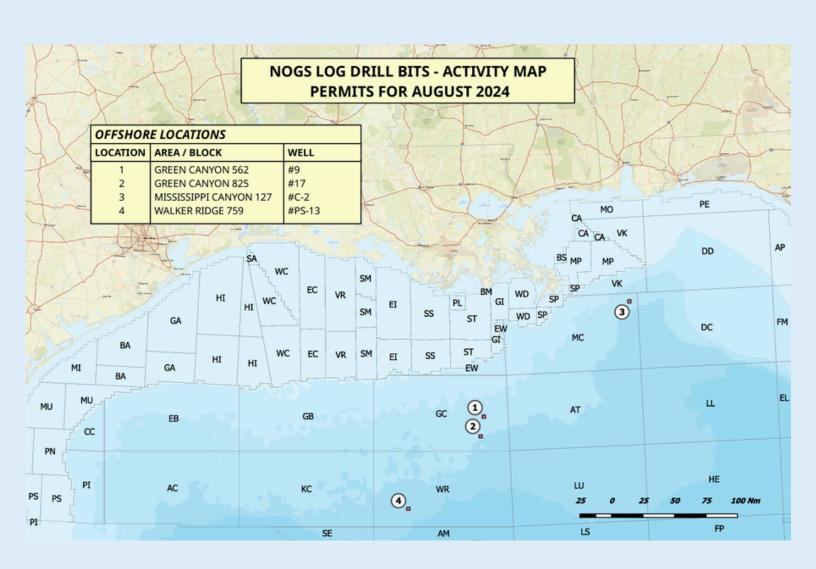
On August 30th, Baker Hughes reported that there are 17 active mobile offshore rigs in the GoM, which is 2 less than last month and 65.4% of the rigs under contract mentioned above. Currently, 1 rig is drilling on the shelf, and 16 rigs are drilling in deepwater. The shelf rig is located in the Eugene Island Area. The deepwater rigs include 8 rigs in the Mississippi Canyon Area, 2 rigs each in the Green Canyon Area, Alaminos Canyon and Keathley Canyon Areas, and 1 rig each in the Walker Ridge and Garden Banks Areas.

On August 30th, the Baker Hughes total U.S. rig count stood at 583 rigs, which is 6 less than reported at the end of July 2024. Of the 583 rigs, 483 (82.8%) are oil rigs and 95 (16.3%) are gas rigs. Five rigs are listed as miscellaneous. Of the 583 wells being drilled, 521 (89.4%) are horizontal and 14 (2.4%) are vertical. A year ago, there were 631 rigs working in the U.S. inferring that the current 48 rig decline corresponds to an 8.2% decrease in rigs year over year. Nationally, Texas has the largest number of rigs with 274, which is 47% of the total number of rigs in the U. S. Louisiana currently has a total of 40 rigs, which is 1 less than last month. Louisiana ranks third behind New Mexico, which has 105 rigs.

DRILL BITS



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





Recent Energy Headlines

September 2024 Recap

9/25/2024 - Is Oil More Likely to go to \$60 or \$100 in 2024? - Is oil more likely to go to \$60 per barrel or \$100 per barrel this year? The answer to that question is \$100 per barrel, according to Michael Rubin, a Senior Fellow at the American Enterprise Institute (AEI), who expressed his view in an exclusive interview with Rigzone. "Oil will rebound to \$100," Rubin told Rigzone. "First, so many different regions are on the precipice of greater conflict. Second, the uncertainty surrounding the U.S. election will encourage rogues to act sooner rather than later," he added. Read Full Article

9/23/2024 - Congressman Higgins, Hageman Introduce Legislation to Enhance Oil and Gas Leasing - Congressman Clay Higgins (R-LA) and Congresswoman Harriet Hageman (R-WY) introduced the Federal Lands and Waters Leasing Transparency Act, which would hold energy regulators accountable and streamline the federal leasing process for lands and waters. In recent years, the oil and gas industry has experienced significant challenges regarding the leasing process managed by the Bureau of Ocean Energy Management (BOEM) and the Bureau of Land Management (BLM). Current evaluation methods by BOEM are problematic because they do not accurately reflect the true market value of resources. This leads to frequent rejections of industry bids with little explanation, causing uncertainty and discouraging investment in new energy exploration and production. Read Full Article

9/18/2024 - Oil and gas execs talk fracking, LNG pause and 'realistic science' -Executives from Chevron and other fossil fuel companies said Tuesday that natural gas is the primary option for slashing the energy industry's carbon emissions as a shift to emerging technologies drags on longer than expected. Chevron CEO Mike Wirth, speaking on the first day of this week's Gastech conference, called for a "balanced conversation" about changes in the energy sector and the role of natural gas based on "realistic science." He said the fuel can deliver reliability as well as lower carbon dioxide emissions, citing its role in power generation as coal plants are displaced. "Cutting these emissions by switching from coal to natural gas could represent the single greatest carbon reduction initiative in history," Wirth said in prepared remarks. "These reductions are achievable and not disruptive to national economies or individual lives." Read Full Article

9/16/2024 - Development of new fields in Gulf of Mexico to offset production decline in 2024 and 2025 - We recently implemented a new model for forecasting crude oil and natural gas production from the U.S. Federal Offshore Gulf of Mexico (GOM) in the Short-Term Energy Outlook (STEO). In our latest outlook, we forecast that GOM production will remain relatively flat with new fields offsetting the natural production declines from existing fields. We forecast that 1.8 million barrels per day (b/d) of crude oil will be produced in the GOM in 2024 and 1.9 million b/d in 2025, compared with 1.9 million b/d in 2023. We expect GOM natural gas production to average 1.8 billion cubic feet a day (Bcf/d) in both 2024 and 2025, compared with 2.0 Bcf/d in 2023. At these volumes, the GOM would contribute about 14% of U.S. oil production and 2% of U.S. marketed natural gas production. Read Full Article





October 19, 2024

11:00 am - 3:00 pm

Volunteers needed for Super Saurus Saturday
October 19th 11 am -3 pm
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of a high standard of professional conduct of its members. The full history of the
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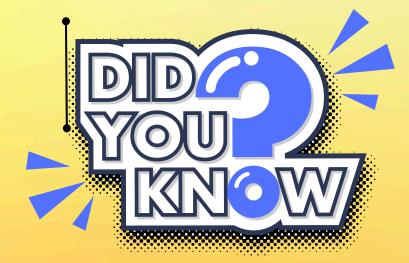












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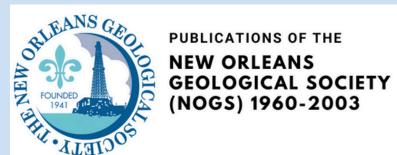
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