NOGS LOG

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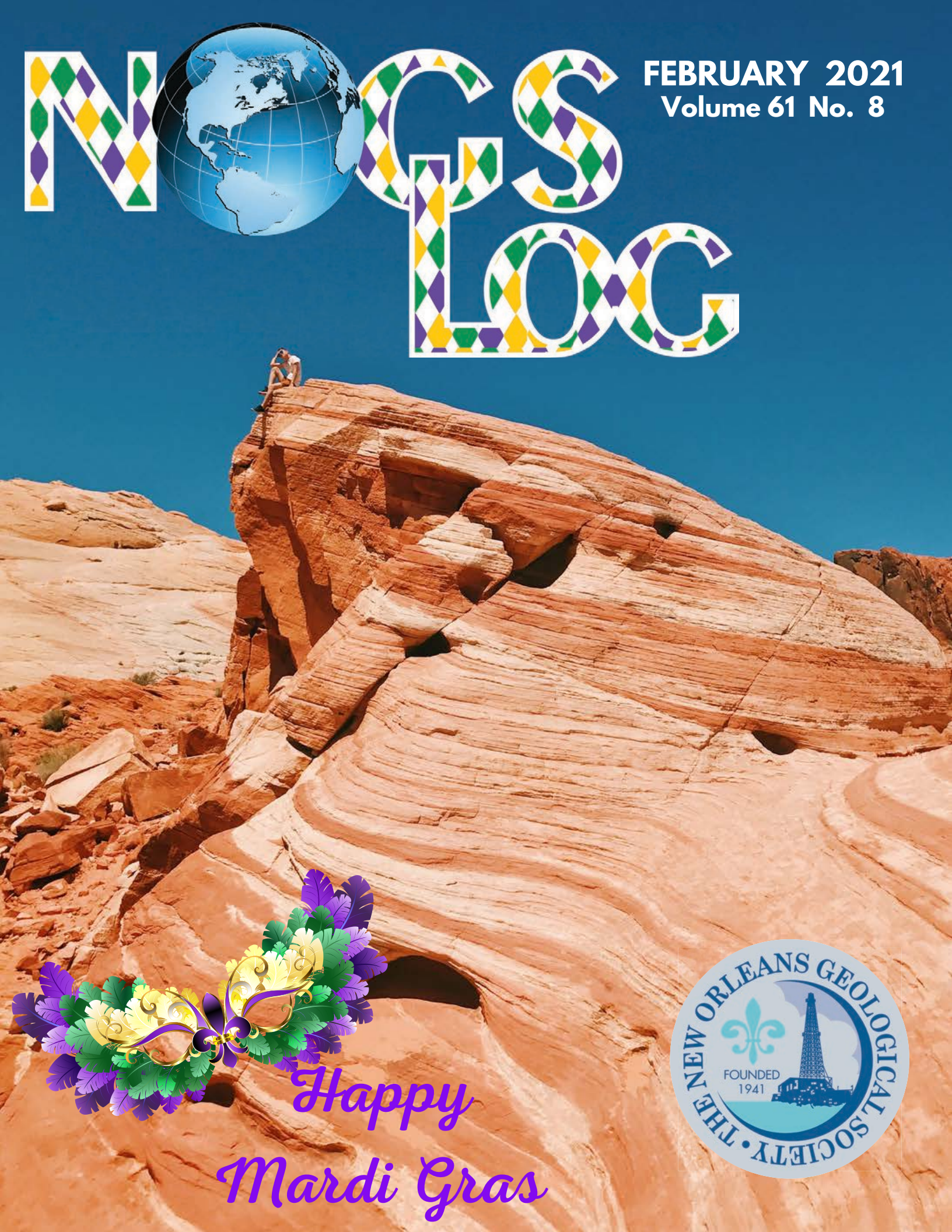


Happy Mardi Gras

THE NEW ORLEANS GEOLOGICAL SOCIETY • FOUNDED 1941

NOGS MARCH 2021 MEETING

MONDAY, MARCH 1, 2021
11:30 AM ZOOM MEETING

AUSTIN CHALK

Dr. Robert Loucks

Click Here to Register

UPCOMING NOGS MEETINGS

APRIL 2021

Dr. Sharon Cornelius
University of Houston
Geo-Pressure in the Gulf of Mexico

MAY 2021

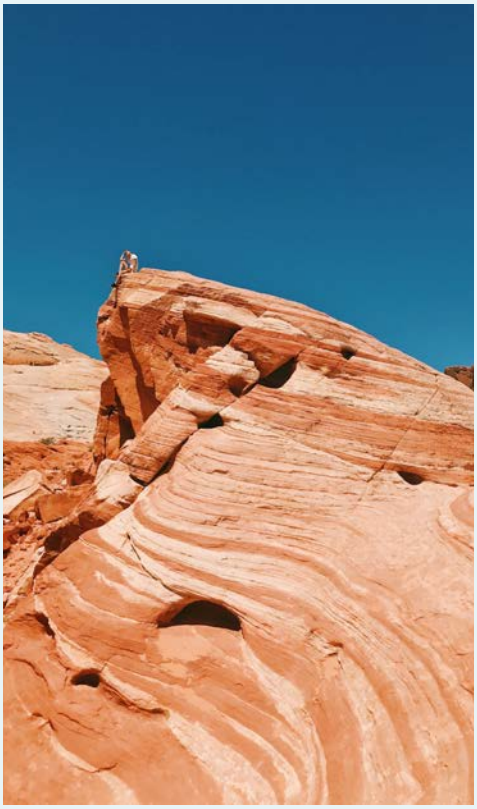
Dr. John Snedden
University of Texas at Austin
The Gulf of Mexico Super Basin

JUNE 2021

Abdul Wahab , MS
Submarine Fan Architecture

Anyone who has a great technical talk that they would like to share with NOGS, or who knows of someone who we should invite to present please email us at admin@nogs.org

IN THIS ISSUE



On the Cover

Fire Wave, located in Valley of Fire State Park, Nevada

Fire Wave is located in Valley of Fire State Park is located 58 miles northeast of Las Vegas, Nevada, near the Arizona border. The park covers about 40,000 acres and was named for its fiery red sandstone formations dating from the age of the dinosaurs.

These formations were exposed where older rocks of Cambrian age (about 500 million years old) were pushed sideways on a thrust fault over younger rocks (Jurassic, about 160 million years old) of the Aztec Sandstone. The sandstone was originally laid down in a colossal, long-lived sandy desert much like today's Sahara. Before the area was a dry desert, it was an inland sea. The red color is from the presence of iron oxides in the sand.

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. 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**

A MESSAGE FROM NOGS PRESIDENT

JOHN R. DRIBUS

To members and friends of the New Orleans Geological Society:

Welcome to 2021! It's certainly good to finally see 2020 in the rearview mirror, and we are hopeful that the coming year will usher in better days. For the time being however, Louisiana and most of the nation, is experiencing a strong surge in Covid cases that have filled many ICU units in our local hospitals. On January 12, our Governor extended the modified Phase Two Covid mitigation measures for another 28 days (to Feb 10). For more details on Phase Two, please visit the Louisiana Department of Health website at http://ldh.la.gov/Coronavirus/.

Data indicates that informal social gatherings are the biggest culprit right now for spreading the virus, so such meetings are discouraged. Consequently, NOGS will continue to offer our monthly technical Webinar Series instead of holding in-person luncheon meetings. We are very fortunate to have the technology to conduct and listen to presentations from the safety of our homes to help slow the spread of the virus. The NOGS Program Committee has assembled a very exciting slate of webinar speakers through June 2021. In February, Dr. James Willis will talk about Shale Analysis in Gulf of Mexico Turbidite Reservoirs. In March, Dr. Robert Loucks will discuss the Austin Chalk Play, followed in April by Dr. Sharon Cornelius from the University of Houston presenting her work on Geopressure in the Gulf of Mexico. In May, Dr. John Snedden from the University of Texas will review the Gulf of Mexico Super Basin, and in June, NOGS Scholarship recipient Abdul Wahab from Tulane will share his work on Submarine Fans.

Later this year, we have talks scheduled on the Salinas Salt Basin Offshore Mexico and on the Jurassic Norphlet Play Onshore. We still have some speaker slots available for 2021, so I invite you to contact me or Hillary Sletten, NOGS VP, if you have an interesting technical talk that you would like to share, and we will put you on the speaker's calendar!

In addition to the monthly webinars from NOGS you also have the option to attend various other on-line and (perhaps) in-person technical events this year including:

- AAPG Geosciences Technology Workshop on Decision-based Integrated Reservoir Modeling to be held online Feb 1-2.
- AAPG Prospect and Property Expo (APPEX) held on-line March 1-4.
- 2021 Mexico Offshore Exploration Summit held on-line April 13.
- AAPG Annual Convention & Exhibition (ACE) in Denver, Colorado May 23-26 (call for abstracts now open)
- Unconventional Resources Technology Conference (URTeC) in Houston July 26-28.
- Several in-person AAPG Geoscience Technology Workshops planned in 2021 in Lisbon, Portugal (Mixed
- Hybrid Systems), Salzburg, Austria (Evaporites), Barcelona, Spain (Thrust Belts),and Abu Dhabi (Geologic Modeling).

Please visit the AAPG website or the latest edition of the AAPG Explorer for details and registration. Please be aware that we still have some very nice NOGS 2021 calendars for sale created from photographs taken by our own members. The money we collect from sales, as well as from your yearly dues, will help to fund our support of the local children's museums.

Regards,
John Dribus

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Picture From The Past

Final assembly of Rock & Mineral kits at UNO's Geology Department. From our website's NOGS History page: In August 1993, the School Information Committee brought to a successful conclusion their Rock and Mineral Identification Sets Project. Fifty sets, each with over fifty hand samples, were presented to area high school science teachers.

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.

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THE NEW ORLEANS GEOLOGICAL SOCIETY
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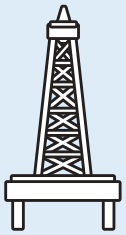
DRILL BITS

OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES

BY AL BAKER



During December 2020, the U.S. Department of the Interior Bureau of Safety and Environmental Enforcement (BSEE) approved 94 Gulf of Mexico (GoM) drilling permits. Fourteen of the permits were for shelf wells, and the remaining 80 permits were for deepwater wells. Of the total number of permits, there were 6 new well permits issued; 5 were on the shelf and 1 was in deepwater.

The five shelf new well permits were for Arena Offshore development wells. They were awarded permits for their Eugene Island 252 #L-11, #L-12 and #L-13 wells, their Eugene Island 253 #L-10 well, and their South Timbalier 37 #H-15 well.

The single deepwater new well permit was for an exploration well. Union Oil Company of California (Chevron) was given a permit for their Walker Ridge 678 #IS-1 well in St Malo Field.

On December 31st, IHS-Petrodata indicated that the GoM mobile offshore rig supply stood at 59, which is 1 more than last month. The marketed rig supply consisted of 36 rigs, of which 23 were under contract. The marketed rig supply increased by 1 rig from last month, and the contracted rig supply number remained the same as last month. The marketed contracted versus total rig supply utilization rate stood at 61%, and the marketed contracted versus marketed supply utilization rate stood at 63.9%. By comparison, the December 2019 total fleet utilization rate stood at 59.2% with 42 rigs under contract out of the 71 rigs in the fleet.

On December 30th, Baker Hughes reported that there are 17 active mobile offshore rigs in the GoM, which is 5 more than last month and 73.9% of the rigs under contract mentioned above. Currently, 1 rig is drilling on the shelf and the remaining 16 rigs are drilling in deepwater. They include 4 rigs in the Mississippi Canyon Area, 4 rigs in the Walker Ridge Area, 3 rigs in the Alaminos Canyon Area, 2 rigs in the Green Canyon Area, 2 rigs in the Ewing Bank Area, and 1 rig each in the Eugene Island and Alaminos Canyon Areas.

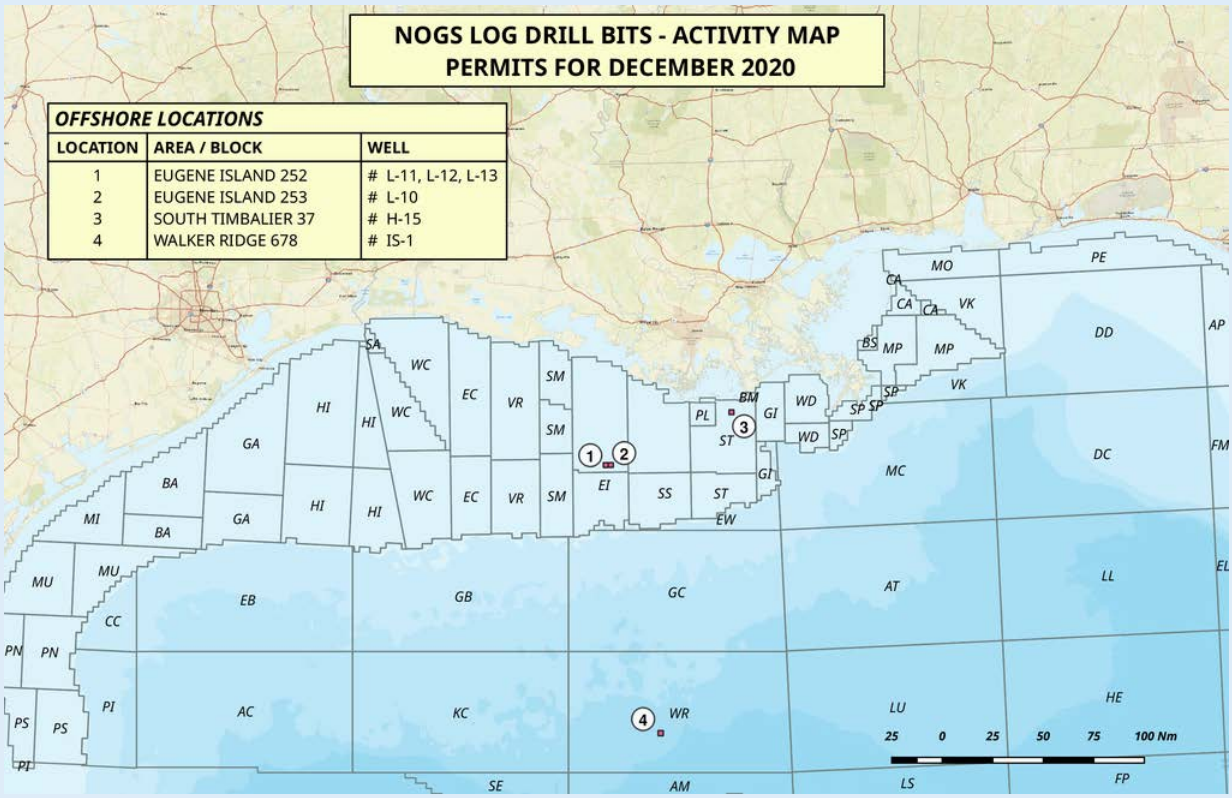
On December 30th, the Baker Hughes total U.S. rig count stood at 351 rigs, which is 31 more rigs than reported at the end of November 2020. Of the 351 rigs, 267 (76.1%) are oil rigs and 83 (23.6%) are gas rigs. The remaining rig is listed as miscellaneous. A year ago, there were 796 rigs working in the U.S. inferring that the current rig figure represents a 55.9% decline in rigs year over year. At present, Texas continues to have the largest number of rigs with 161, which is 45.9% of the total number of rigs in the U. S. Louisiana currently has a total of 39 rigs. Nationwide, Louisiana continues to rank third in the rotary rig count. New Mexico ranks second with 65 rigs.

During December, the Bureau of Ocean Management (BOEM) Gulf of Mexico Region began their Phase 2 acceptance of the bids received in OCS Sale 256 that was held on November 18, 2020 in New Orleans. As of December 23rd, the BOEM has deemed 42 tracts as acceptable. A total of 51 tracts remain under their evaluation.

DRILL BITS

OFFSHORE GULF OF MEXICO SHELF AND DEEPWATER ACTIVITIES

BY AL BAKER



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Oil Industry Headlines ..In The News (January 2021)

1/23/2021 – World Oil - Biden's plan to cut U.S. oil production becomes clearer - Hours after taking office, President Joe Biden made good on a campaign promise to cancel the Keystone XL oil pipeline. And The Interior Department's order, signed late Wednesday, changes procedures for 60 days while the agency's new leadership gets into place. It requires top brass to sign off on oil leases and permits as well as decisions about hiring, mining operations and environmental reviews.

1/22/2021 - Acadiana Advocate - Why Louisiana energy experts anticipate job loss, high energy costs amid Biden oil regulations - President Joe Biden has put his team to work reviewing dozens of actions taken by former President Donald Trump, aiming to reverse orders that he says harm the environment or endanger public health. For the energy sector and Louisiana jobs, the impact could be far-reaching. "A large portion of drilling activity in Louisiana is from offshore federal waters," Mike Moncla, interim president of the Louisiana Oil & Gas Association.

1/21/2021 - Oil & Gas Journal - 60-day oil and gas leasing moratorium ordered on federal lands, waters - A 60-day moratorium on new oil and gas leases and permits on federal onshore and offshore lands was issued Jan. 20 by Acting US Interior Sec. Scott de la Vega. The moratorium also blocks "grants of rights of way, easements, or any conveyances of property, or interests in property, including land sales and exchanges, or any notices to proceed under previous surface use authorizations that will authorize ground-disturbing activities," that would serve as a barrier to pipelines and roads crossing federal lands.

1/20/2021 – The Hill – Opinion by Scott Tinker - We must go honest to 'go green' - The Biden administration represents itself as following science with regard to energy policy, yet it presents a simplistic clean and dirty energy narrative with the obvious solution to get rid of fossil fuels and "go green." Unfortunately, this narrative is naïve, expensive and misleading. It will harm U.S. energy security, the economy, the environment and the impoverished. (Read the full article in this February 2021 issue)

1/13/2021 - BIC Magazine - Oil and gas contributed $73B to Louisiana's 2019 GDP - America's oil and natural gas industry is a critical and irreplaceable component of our nation's economy, supported by thousands of small businesses and hundreds of thousands of energy workers throughout the Gulf Coast and beyond. A recent report by global consulting firm ICF explores just how significant these economic impacts are in Louisiana. According to the report prepared for LMOGA and the American Petroleum Institute, Louisiana's oil and natural gas industry supported 249,800 jobs and contributed $73 billion to the state's GDP in 2019.

1/9/2021 - Longtime New Orleans Fortune 500 CEO Jim Bob Moffett has died, family says – (Jim Bob was also a NOGS member) A longtime business leader and philanthropist with strong ties to New Orleans and Southeast Louisiana has died. Jim Bob Moffett, the former president and CEO of oil and gas giant Freeport-McMoRan, died at his home in Austin, Texas, Friday night. Moffett co-founded and ran the Fortune 500 company from his downtown New Orleans office building for almost 30 years. A former University of Texas football player, Moffett's company sponsored the local PGA tour event for years, and he was very generous in giving back to local charities and universities like Tulane, LSU, the Audubon Nature Institute and New Orleans City Park. Moffett had been fighting a long battle with Parkinson's disease. He was 82.

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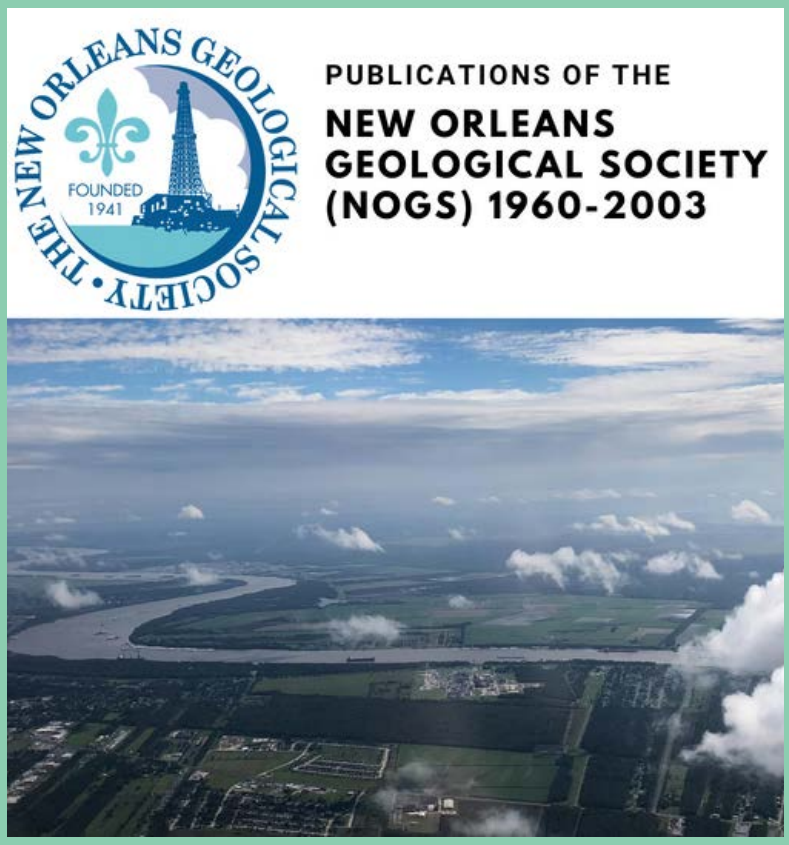

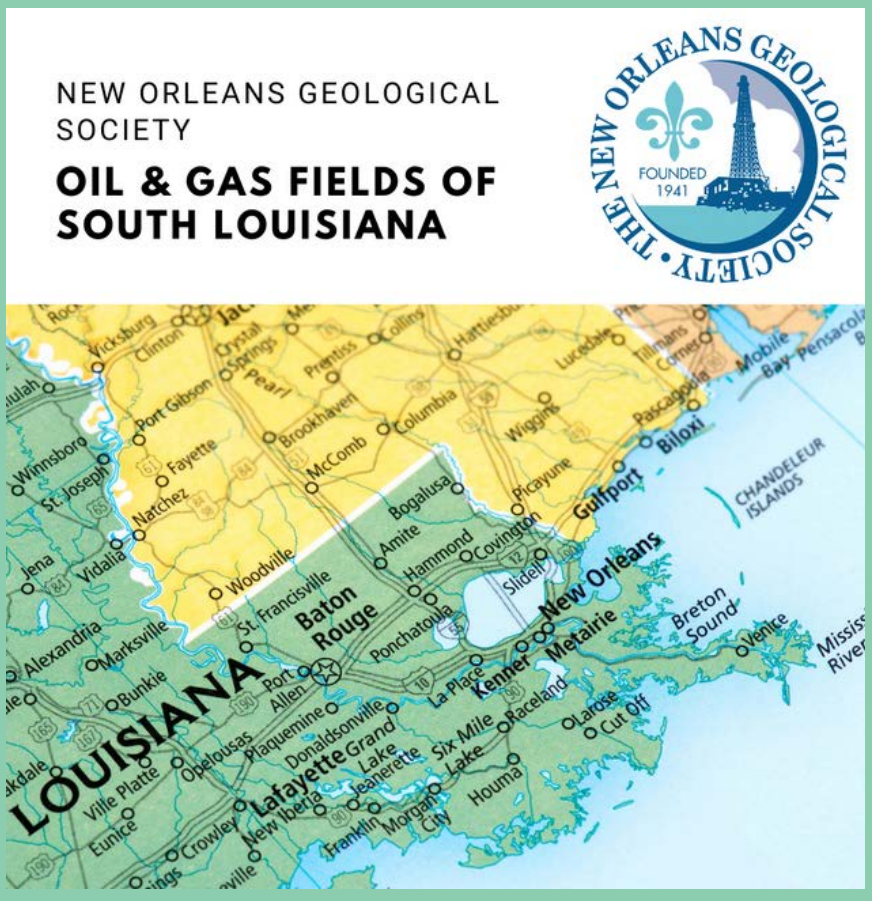

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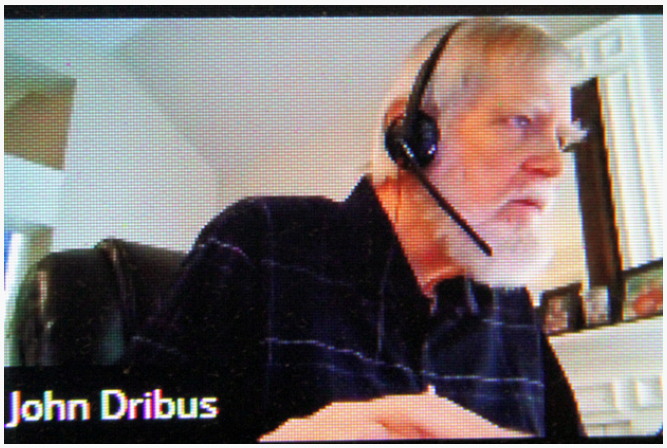
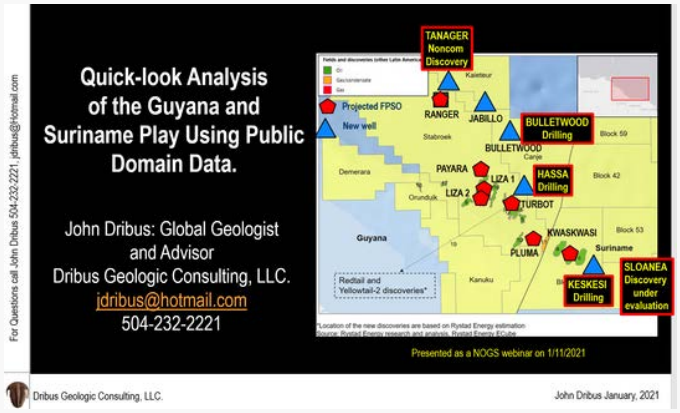
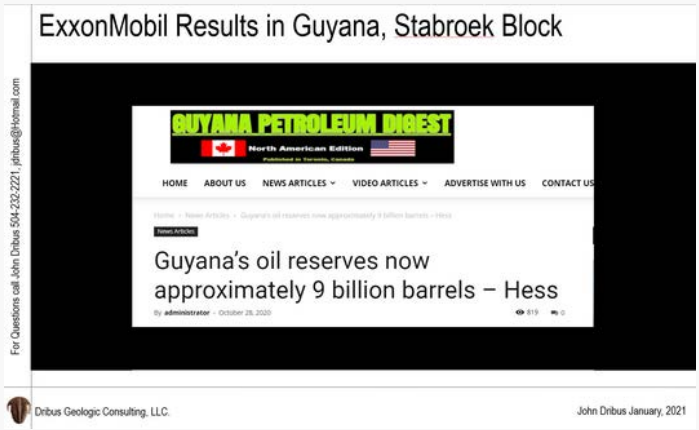
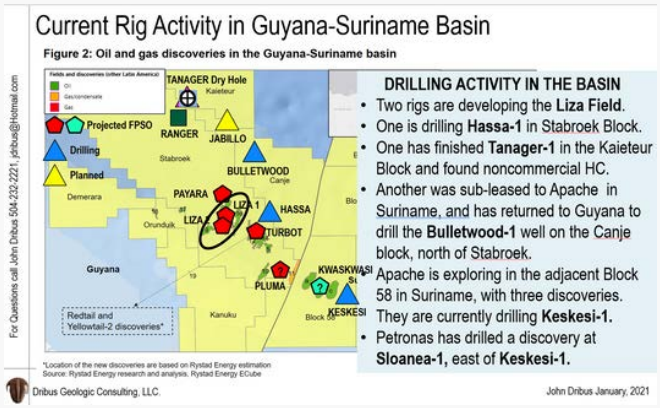
JANUARY VIRTUAL MEETING

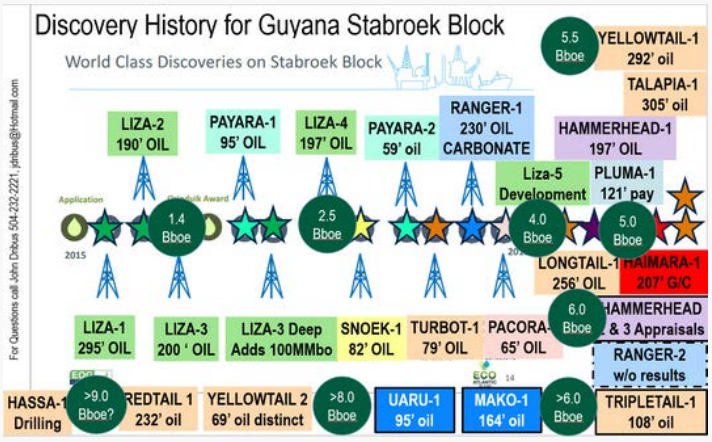
John Dribus











AN UPDATE ON THE DEEP WATER TURBIDITE PLAY IN GUYANA AND SURINAME

Researchers trace geologic origins of Gulf of Mexico 'super basin' success

PHYS.org – January 15, 2021 (by University of Texas at Austin)
https://phys.org/news/2021-01-geologic-gulf-mexico-super-basin.html

The Gulf of Mexico holds huge untapped offshore oil deposits that could help power the U.S. for decades.

The energy super basin's longevity, whose giant offshore fields have reliably supplied consumers with oil and gas since the 1960s, is the result of a remarkable geologic past—a story that began 200 million years ago among the fragments of Pangea, when a narrow, shallow seaway grew into an ocean basin, while around it, mountains rose then eroded away.

The processes that shaped the basin also deposited and preserved vast reserves of oil and gas, of which only a fraction has been extracted. Much of the remaining oil lies buried beneath ancient salt layers, just recently illuminated by modern seismic imaging. That's the assessment of researchers at The University of Texas at Austin, who reviewed decades of geological research and current production figures in an effort to understand the secret behind the basin's success.

Because of its geological history, the Gulf of Mexico remains one of the richest petroleum basins in the world. Despite 60 years of continuous exploration and development, the basin's ability to continue delivering new hydrocarbon reserves means it will remain a significant energy and economic resource for Texas and the nation for years to come, said lead author John Snedden, a senior research scientist at the University of Texas Institute for Geophysics (UTIG).

"When we looked at the geologic elements that power a super basin—its reservoirs, source rocks, seals and traps—it turns out that in the Gulf of Mexico, many of those are pretty unique," he said.

The research was featured in a December 2020 special volume of the American Association of Petroleum Geologists Bulletin focused on the world's super basins: a small number of prolific basins that supply the bulk of the world's oil and gas.

According to the paper, the geologic elements that have made the Gulf of Mexico such a formidable petroleum resource include a steady supply of fine- and coarse-grained sediments, and salt. Thick layers of salt are buried in the Earth, marking a time long ago when much of the ancient sea in the basin evaporated.

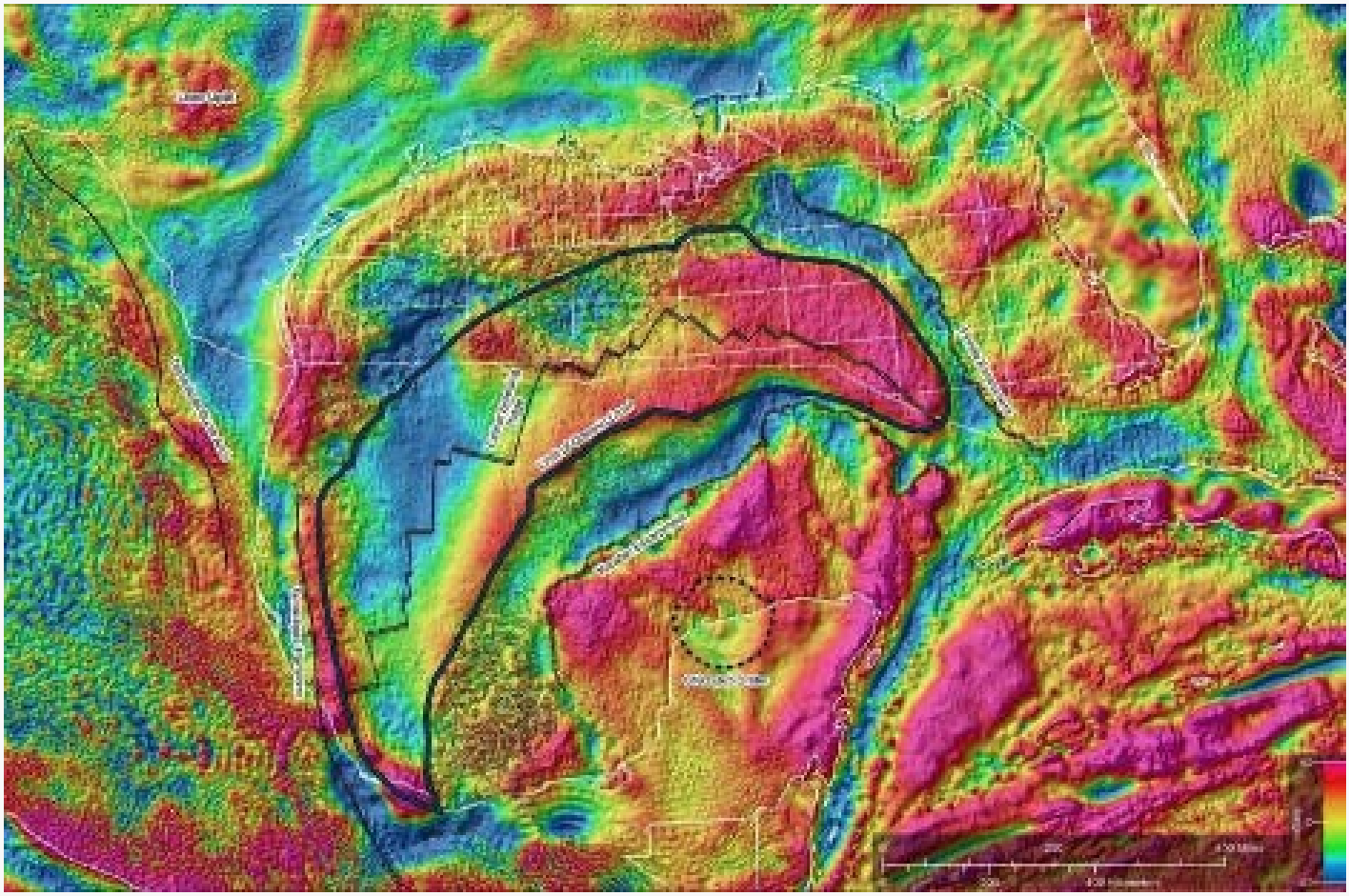
Geologically, salt is important because it can radically alter how petroleum basins evolve. Compared to other sedimentary rocks, it migrates easily through the Earth, creating space for oil and gas to collect. It helps moderate heat and keeps hydrocarbon sources viable longer and deeper. And it is a tightly packed mineral that seals oil and gas in large columns, setting up giant fields.

"The Gulf of Mexico has a thick salt canopy that blankets large portions of the basin and prevented us for many years from actually seeing what lies beneath," Snedden said. "What has kept things progressing is industry's improved ability to see below the salt."

According to the paper, the bulk of the northern offshore basin's potential remains in giant, deepwater oil fields beneath the salt blanket. Although reaching them is expensive and enormously challenging, Snedden believes they represent the best future for fossil fuel energy. That's because the offshore—where many of the giant fields are located—offers industry a way of supplying the world's energy with fewer wells, which means less energy expended per barrel of oil produced.

Snedden said there is still much to learn about hydrocarbons beneath the Gulf of Mexico, how they got there and how they can be safely accessed. This is especially true in the southern Gulf of Mexico, which was closed to international exploration until 2014. One of the few publicly available datasets was a series of UTIG seismic surveys conducted in the 1970s. Now, a wealth of prospects is emerging from new seismic imaging of the southern basin's deepwater region.

"When you look at recent U.S. oil and gas lease sales, Mexico's five-year plan, and the relatively small carbon footprint of the offshore oil and gas industry, I think it's clear that offshore drilling has an important future in the Gulf of Mexico," Snedden said.



Dr. Scott Tinker's Opinions on "Going Green"

With the recent inauguration of President Biden, concerns for our petroleum industry have escalated due the mindset of the Administration to rein in many sound opportunities available to our industry. Tinker's article, presented below, succinctly details the reasons why fossil fuels are necessary, and owing to our wealth, we can easily ameliorate any and all environmental concerns. His Op-Ed column was published in the January 20, 2021, issue of *The Hill*, an online newspaper which discusses all pertinent matters facing our country. If you wish to read Tinker's article online, please go to: https://thehill.com/opinion/energy-environment/534914-we-must-go-honest-to-go-green?rnd=1611157798

We must go honest to 'go green'

BY SCOTT TINKER, OPINION CONTRIBUTOR — 01/20/21 11:00 AM EST 292

THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

(c) Greg Nash

The Biden administration represents itself as following science with regard to energy policy, yet it presents a simplistic clean and dirty energy narrative with the obvious solution to get rid of fossil fuels and “go green.”

Unfortunately, this narrative is naïve, expensive and misleading. It will harm U.S. energy security, the economy, the environment and the impoverished.

To be sure, producing and burning coal and oil have significant environmental impacts. But what goes unmentioned are the extensive benefits of affordable, reliable energy provided by coal and oil to make cheap electricity, power cars and underpin a modern economy.

The ironic kicker is that economic wealth allows a nation to regulate and clean up the environment: its air, soil, water and emissions. Coal and oil are not green, but the wealth they create cleans up the environment. And, only wealthy nations such as the U.S., U.K. and Germany have been able to afford to begin to transition beyond coal for power generation.

The global reality faced by the Biden administration is that poorer economies represent about two-thirds of the world’s population and they have a growing energy appetite. Just as the U.S. and Western Europe did, China is building an eye-watering number of coal plants to power its expanding share of global manufacturing. China now burns more coal than the rest of the world combined. Notwithstanding silly emissions pledges, China has no plans for reducing coal. They can’t afford to. The reality is that only economic wealth will allow China and other emerging economies to begin to transition away from coal and clean up the environment.

So why not just switch from dirty coal and oil to clean and renewable solar and wind? Two reasons: They are not renewable and they are not clean. Sure, during non-cloudy days and windy times, the wind and the sun can be captured and turned into electricity. But because the amount of energy is not “dense,” it takes scads of land and collectors — solar panels and wind turbines — to capture it.

It also takes oodles of batteries to back up intermittent solar and wind so that everything keeps running uninterrupted. There is also replacement. The panels, turbines and batteries wear out after 10 to 20 years, and the metals, chemicals and toxic materials required to make them must be constantly mined, manufactured and disposed of in landfills. Coupled with some carbon dioxide emissions associated with those processes, solar and wind are neither renewable nor clean.

To add to it, contrary to popular spin, solar and wind are not cheaper than coal or natural gas. The reported lower cost is misleading because it represents the cost of electricity at the generation source, the so-called levelized cost of electricity (LCOE), not the actual cost to the consumer. Intermittent solar and wind require almost 100 percent redundant and expensive backup power from natural gas plants or batteries to be reliable, which makes them more expensive to the consumer. That is partly why people in California and Germany pay much more for electricity. This higher cost is both regressive and inequitable to lower-income people.

China controls 50 to 70 percent of global lithium, cobalt and polysilicon and is aggressively acquiring other mined materials to make batteries, turbines and solar panels. As we move to electric vehicles (EVs), we are essentially shifting control of transportation fuels from OPEC to China. Is that more secure? Mining practices for EV metals are known to violate human rights, especially those of children. Do we want to promote that?

Wind, solar and batteries have a significant role to play, but it's time to stop pretending that they can provide all the benefits of coal and oil, with none of the negative effects. The Biden administration, as a proponent of science, has a chance to represent the complex social, legal, political, economic and, yes, scientific challenges of energy.

To "go green," we must "go honest" so that we can address and solve the real energy challenges before us. Scott Tinker is a professor and the director of the Bureau of Economic Geology at The University of Texas at Austin.

Editors Note: I encourage readers to take the opportunity to watch two important films by Dr. Tinker concerning energy. Both are on our website under the LINKS Tab Educational Films on Energy
Switch Energy Alliance movie "SWITCH ON" released in 2020 - Click Here
Switch Energy Alliance movie on in 2012 on alternate energy sources - Click Here

Who was that Roughneck? Winthrop Rockefeller in the Texas and Louisiana Oil Fields (1933-1937)

Jeff Spencer, spencerj320@gmail.com

NOTE: This article was published in the January 2021 AAPG Explorer.

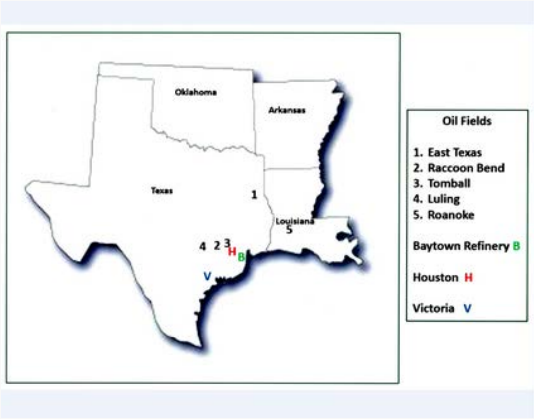


Figure 1 Map showing the Texas and Louisiana oil fields and refinery where Winthrop Rockefeller worked or visited.

Winthrop Rockefeller (1912-1973) was the grandson of John D. Rockefeller (1839-1937) and the fifth of six children of John D. Rockefeller Jr. (1874-1960). John D. Rockefeller organized and incorporated the Standard Oil Company in 1870. By the early 1880s, Standard Oil had a near-monopoly of the United States petroleum industry. At his retirement, John D. Rockefeller was he was said to be worth 1.5 billion dollars; the world's richest man. He was also considered the world's greatest philanthropist, giving more than 500 million dollars to educational, scientific, and religious institutions. John D. Rockefeller Jr. worked for Standard Oil from 1897-1910, before pursuing other business and philanthropic interests.

Determined to learn the oil business "from the ground up," Winthrop worked at Standard Oil of New Jersey's Bayonne, New Jersey refinery for a few weeks in June and July, 1933. In late July, Winthrop visited some Humble Oil and Refining Company Texas oil fields, including a tour of the giant East Texas oil field discovered in 1930. Humble Oil and Refining Company, founded in 1911, became an affiliate of Standard Oil of New Jersey in 1919. Winthrop began working at Humble's Baytown, Texas oil refinery, but his stay in Texas was cut short after rumored kidnapping threats caused him to return to New York in August, 1933. In February, 1934 during his third year at Yale University, he left school, returning to Texas to work for Humble as roughneck and roustabout.

The Raccoon Bend oil field is located approximately sixty miles northwest of Houston. Harry Pennington, an independent oil operator from San Antonio believed the area had the signs of an underlying oil field. In 1925 and early 1926 he put together a large lease block. Realizing that he needed a financial partner to cover his estimated 7.5 million dollars of required capital, he approached H. T. (Henry) Staiti (1874-1933), the president of Valley Oil Corporation. Henry Staiti had brought in wells at Humble, Damon Mound, West Columbia, Pierce Junction, and other Texas Gulf coast oilfields. Staiti agreed to help fund the project for an interest in the wells and Pennington assigned the leases to Valley Oil. Henry Staiti contacted Humble Oil and Refining Company, which sent geologist Frith Owen (1898-1977) to evaluate the property. Owen liked what he saw and recommended that Humble Oil join the partnership. Humble purchased a half interest in the leases on June 7, 1926 and the company acquired full control of the field on May 21, 1927. Wallace Pratt (1885-1981) was involved with the Raccoon Bend initial negotiations between Humble Oil and Valley Oil Corporation.

Figure 2 Winthrop Rockefeller (right) and two Humble Oil colleagues at an unknown Texas oil field, circa 1935. Photo courtesy of the UALR Center for Arkansas History and Culture.

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Wallace Pratt (1885-1981) was involved with the Raccoon Bend initial negotiations between Humble Oil and Valley Oil. In 1918, Humble hired Pratt as the company's first geologist. Pratt was a pioneer petroleum geologist who would become a vice-president of Humble Oil and Refining Company and later, a vice-president of Standard Oil. He was also one of the founders of the American Association of Petroleum Geologists and the organization's fourth president. Pratt would be involved with the logistics of Winthrop's later training in Humble's oilfields. The field's first gas well was completed in 1926, pre-Humble's acquisition. The Humble Oil and Refining Company's No. 2 Gutowski well was completed as a 500 barrel of oil per day (BOPD) discovery well in February, 1928 from a sand at a depth of 3282 feet.

Raccoon Bend was one of the Humble Oil Company oil fields where Winthrop worked. Humble Oil's Raccoon Bend oil field included a 50-man dormitory and family cottages, but Winthrop roomed eight miles southwest in the small town of Bellville at the home of Mrs. Mildred Duncan. A March 15, 1934 letter from Winthrop to his parents included, "I will mark Houston, Eagle Lake where we first stayed and commuted to Bellville every day and finally Bellville where we are now located." After a short time working at Raccoon Bend, Winthrop moved on to the Tomball oil field, 50 miles east of Raccoon Bend.

By early 1933, Humble Oil and Refining Company had accumulated several thousand acres of leases near Tomball, Texas, approximately 35 miles northwest of Houston. Reflection seismic crews had located a large structure in the area the previous year. Humble also acquired a half-interest in a 10,000-acre block with Magnolia Petroleum Company. On May 22, 1933, the Humble and Magnolia No. 1 J.F.W. Kobs was completed as the discovery well for the Tomball oil field. The well tested at 1656 (BOPD) from an Eocene Cockfield sand at a depth of 5569 feet. Development of the oil field was rapid.

Winthrop arrived at Humble Oil's Tomball oil field camp on April 14, 1934, less than a year after the field's discovery. Winthrop roomed in one of the camp's cottages with a Humble geologist and ate his 35 cent meals at the company's boarding house/commissary, nicknamed "Miz Arnold's." The April 22, 1934 edition of the Galveston (Texas) Times, newspaper reported that, "he has not as yet been assigned to any regular duty. It was understood that he would take his turn at manual labor with the other youths in the field."

Winthrop, and his traveling/working companion William Alton, worked for three months from late 1934 to early 1935 in Louisiana's Roanoke oil field, thirty miles east of Lake Charles. Alton and Winthrop apparently were old friends and both served as ushers in Winthrop's older brother Nelson's 1930 wedding. Nelson Rockefeller (1908-1979) served as the governor of New York (1959-1973) and the vice-president of the United States (1974-1977).

Alton would later work for Standard Oil in Egypt and Germany. The Roanoke structure was identified by Vacuum Oil Company torsion balance and reflection seismograph surveys in 1928, though it was May 1934 when the field's oil discovery well, the Shell No. 1 J. Kratzer, was completed. Humble Oil had previously drilled two dry holes and a gasser. Humble completed its first oil discovery at Roanoke, the No. B-1 J.W. Devilbriss (720 BOPD), in late 1934.

Figure 3. The Rockefeller family at the 1937 funeral of John D. Rockefeller (John D. Rockefeller Jr., and his sons David, Nelson, Winthrop, Laurence, and John D. III).

A February 15, 1935 letter from Humble Oil's D. (David) B. Harris to Winthrop, in care of Mrs. M.B. Duncan of Bellville, stated that Mr. Pratt had decided that Mr. Alton and Winthrop were being transferred to Raccoon Bend, apparently for a second time. D.B. Harris (1888-1972) was the Humble Oil and Refining Company's Industrial Relations Manager and later served as the company's treasurer and as a director. An excerpt from a March 16, 1935 letter from Harris to John D. Rockefeller, Jr. stated that "It must be said that Winthrop holds the affection and respect of all those with whom he comes in contact. He is just as much at home in the ditch, on the derrick floor or in the field, as he is in the offices and homes of the executives, and he makes friends with all in both groups with equal facility. The men with whom he has labored in the oil fields are his staunchest and most loyal friends. They call him "Rock" and "Rocky" and they are for him 100%." Newspaper articles reported Winthrop's height from six foot to six foot, six inches, but in any case, he is generally the tallest man in group photographs. Several sources state that Winthrop earned seventy-five cents an hour and rented a room for $4.50 a week, though not attributed to a specific oil field or town.

Which Humble Oil Company oil fields Winthrop worked in during much of 1935 and 1936 is unclear. In late October, 1935 Winthrop and friend Alton visited Bellville again, were they had "numerous friends," as reported by
the local newspaper. In a January 1937 newspaper interview, Winthrop also reminisced about "wildcatting around Victoria" (Texas) and working in the Luling oil field. Luling, Texas is 140 miles west of Houston. The United North and South Oil Company discovered the Luling oil field in 1922 with the completion of their No. 1 Rafael Rios well. The well tested 60 BOPD from the Cretaceous Edwards limestone at a depth of 2155 feet. Humble Oil began operations in the Luling oil field in 1925, and in nearby Salt Flat oil field in 1927 and Darst Creek oil field in 1928. In a 1923 AAPG Bulletin paper, Pratt stated that the discovery of the Luling field was "a direct result of geologic investigation"; the mapping of a surface expression of an up-to-the-coast, northeast-southwest trending fault.

Winthrop returned to New York in 1937. A February 4, 1937 letter from Wallace Pratt to Winthrop's father includes, "It has been a pleasant experience to know Winthrop and a privilege to help him study the oil industry. His sojourn with us has been a source of gratification to us and we are happy to believe that it has been helpful to him." For the next two years, Winthrop worked in banking and with charitable organizations. In 1939 Rockefeller was employed in the foreign relations department of Socony-Vacuum Oil Company, an earlier merger of Standard Oil of New York and Vacuum Oil Company.

Rockefeller enlisted in the United States Army in January, 1941. Winthrop served with distinction during World War II and worked for Socony-Vacuum Oil Company again after the war. He would later serve as the governor of Arkansas (1967-1971). Rockefeller would often comment that his years in the oilfields were some of his happiest.

In 1964 the musical album, "Alex Zanetis Writes and Sings the Story of the Oil Fields," was released, with songs such as "High and Dry," "Three Miles Down," and "Doodle-Bug Pete." On the reverse of the album cover, there is a long recommendation by Winthrop, including "This album of oil field songs brings back heart-warming memories to me of the 1930s when I worked several years as a roughneck and roustabout in Texas for Humble Oil & Refining Co. The years there, and those following when I served seven years in the infantry, live with me because I learned so much about the men who are part of the backbone of this nation. Certainly, the oil industry is one of the most vital industries in America and these songs should bring many hours of enjoyment to the millions of men and women associated with the industry."

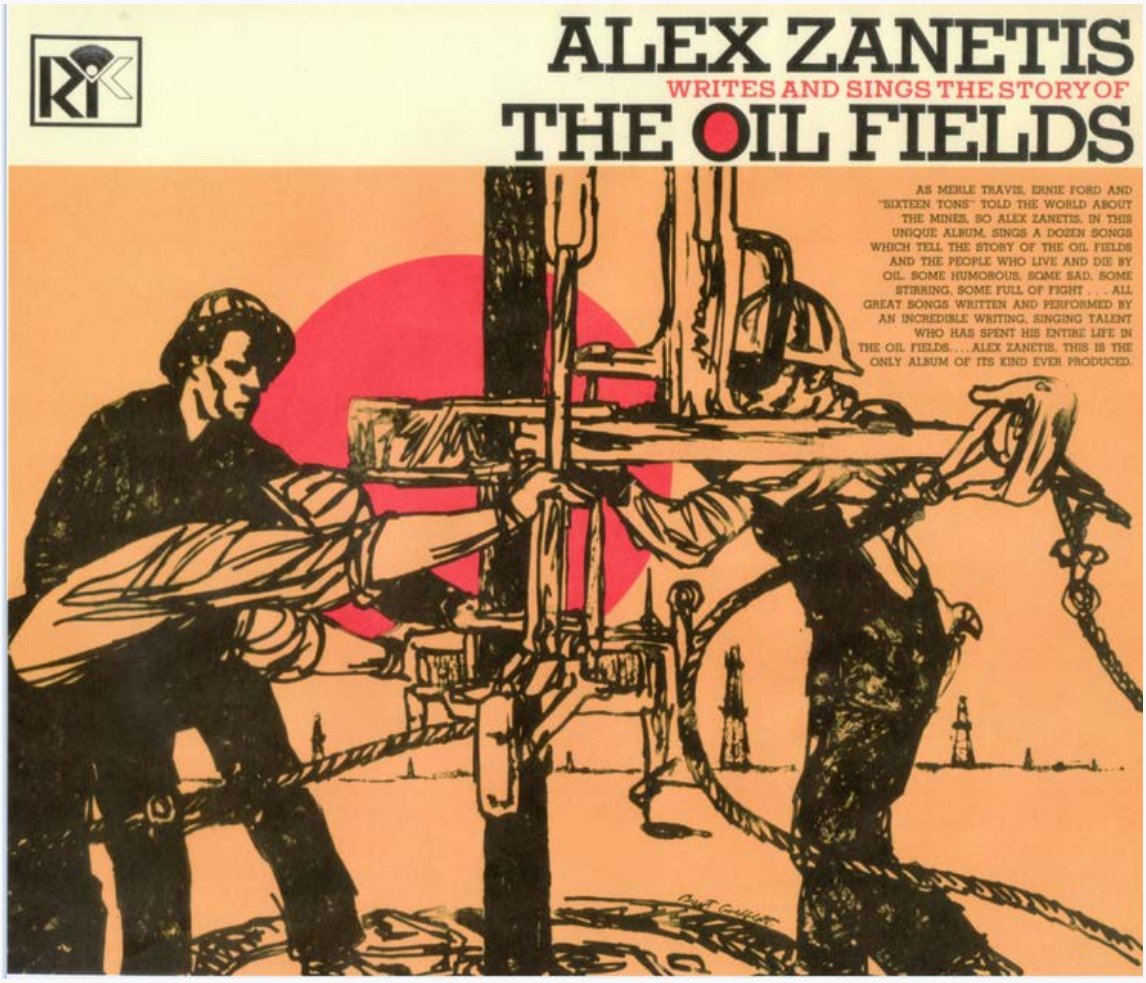

Figure 4 Album cover (1964): "Alex Zanetis Writes and Sings the Story of the Oil Fields."