

October 2018**October Dates to remember**

- Oct 3 - Techies Day
- Oct 5 - World Teachers Day
- Oct 8 - Yom Kippur
- Oct 12 - Columbus Day
- Oct 16 - Boss's Day
- Oct 23 - Unity Day
- Oct 28 - Nat'l Chocolate Day
- Oct 31 - Halloween

COMING IN NOVEMBER:**Family Stories Month****In this issue:**

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ADDC Insight



First new oil wells in years being drilled in shale region

The Associated Press

October 20, 2018 02:42 PM

Updated October 20, 2018 02:43 PM

GILLSBURG, MISS.

An Australian company is drilling new wells in an oil formation that straddles southwest Mississippi and southeast Louisiana, the first new wells drilled in about three years, after a crash in oil prices dried up activity.

Australis Oil & Gas Ltd. announced earlier this month that it had started drilling the first of at least six planned wells near Gillsburg, Mississippi.

The company bought 81,000 acres (32,800 hectares) of leases in the region in 2016 and 2017, adding to an interest it already owned.

The company says it picked well sites in the most productive and proven part of the Tuscaloosa Marine Shale. It says it plans to spend \$43 million in borrowed money on drilling, which would be an average well price of about \$7 million, less than the \$10 million-plus that was the common cost of a well in the region during an earlier burst of drilling.

Australis says it's trying to prove it can drill more cheaply but still equal the oil production of those earlier wells. The company says it should be ready to report on how the first two new wells are producing by March. Like in other regions, the rig will drill a long well running horizontal to the surface of the ground in an oil-bearing rock layer and then workers will pump in fluid to break open, or fracture, the layer, allowing oil to come out.

(continued from Page 1)

The company says a good performance could boost the value of its acreage, which it says has 350 possible well locations in the core region of the Tuscaloosa Marine Shale. The company has said its goal is to sell all or part of its holdings at a windfall once it proves their value. The founders successfully pursued the same strategy in the Eagle Ford region of Texas.

The new drilling has come as the price of a barrel of oil has risen above \$70 at points in recent weeks, the highest price since 2014. That's about the price level that the other major operator in the field, Houston-based Goodrich Petroleum, said last year is needed to make drilling profitable. Goodrich is currently focused on drilling natural gas wells in northwest Louisiana and east Texas.

Australis says it has hired a Nabors Industries drilling rig to drill up to six wells, with an option for more. The company plans to drill a pair of wells from each location, cutting expenses while starting production in two separate leases. Once a well is drilled in a lease unit, the company has secured rights for as long as the well produces. Otherwise, a lease might expire.

ASSOCIATION OF DESK AND DERRICK CLUBS

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2018 Distinguished Member Service Award Association of Desk and Derrick Clubs Sheryl Minear

At the 2018 ADDC Convention in Evansville, Indiana, Sheryl was awarded the prestigious Distinguished Member Service Award (DMSA).

A member of Desk and Derrick for thirty-five (35) years, Sheryl Minear has been the Member that anyone could go to for anything and everything Desk and Derrick.

Sheryl has been employed in the Oil and Gas Industry since 1977. In 1983 she joined Desk and Derrick in Abilene, Texas and quickly became involved in her Club. As a member of the Abilene Club, Sheryl served in every capacity as an officer and chaired or served on all committees at least once, as well as serving as Parliamentarian for several years. In 1997 she served the Association as the Region V Director.

She served as the Chairman of the ADDC Club Partnership Program in 1998 and 1999 and was instrumental in re-developing the program. In 2001 she was the ADDC Membership Committee Chairman and re-developed the ADDC "Gold Book" into the current ADDC Membership Handbook.

In 1999 Sheryl was named the "United States Energy Person of the Year" by Nichols Energy. An honor that she says has been one of the highlights of her membership in Desk and Derrick and that she is most proud of.

In 2002, the ADDC Board asked Sheryl to Chair the "Tech Task Force Committee" and she began researching ideas and along with her committee. The Committee developed the guidelines and program for the current six portions of the ADDC Petroleum Tech Certification Program. Sheryl completed the program in 2007.

Sheryl has held the following offices on the ADDC Board: 2005 she was elected to serve as the ADDC Treasurer, in 2006 Vice President, in 2007 - President-Elect and in 2008 she served as the ADDC President. In 2009 she served as the Immediate Past President.

In 2008, while serving as the Association President, Sheryl was the liaison between Dr. Kay Zellmer and the ADDC Board, establishing an

agreement with Dr. Zellmer to develop a lesson plan for the Energy Activity Book.

In 2015 Sheryl transferred her membership to the San Antonio Desk and Derrick Club, where she currently serves as the Parliamentarian. All the while, with all that she does in and out of Desk and Derrick – Sheryl has been the Editor of the club monthly publication, "The Gusher" for two years.

In 2017 and 2018, Sheryl Minear served as the Region IV Parliamentarian. Since there wasn't anything else for her to do in 2017, she volunteered to serve as the Treasurer for the 2017 ADDC Convention in San Antonio, Texas. Currently she is serving as the 2018 ADDC Registrar Chairman.

Many members of Desk and Derrick have expanded their knowledge from various seminars that Sheryl Minear has conducted, at the Regional Level to the Association. From Leadership Training to the Oil and Gas Accounting portion of the Certification Program, educating our members is important to her. Sheryl has been there to assist our members in any way possible.

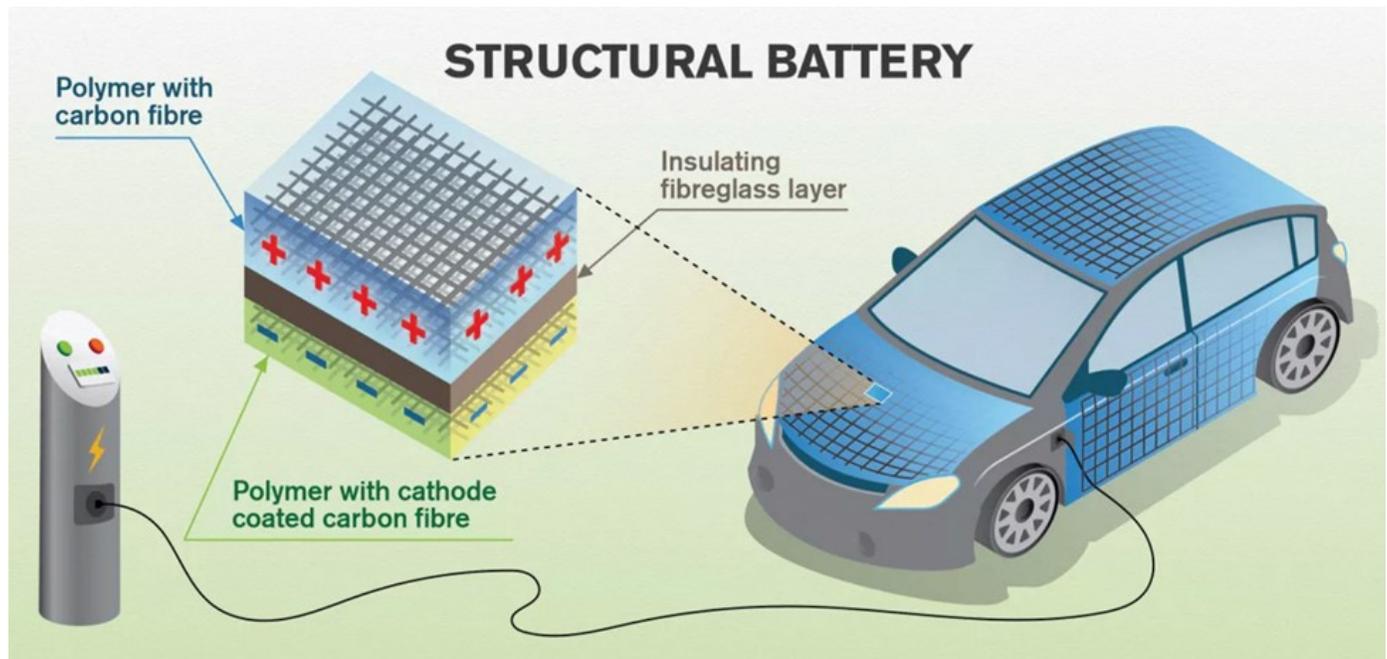
In 2002, Sheryl became a Registered Parliamentarian from the National Association of Parliamentarians. She has served as the ADDC Parliamentarian in 2003, 2004, then again from 2010 through 2017.

Currently Sheryl Minear serves as Vice President of the Council of Petroleum Accountants Abilene Society. In addition, she serves on the Board of Trustees and is the Secretary for the ADDC Foundation.



Electric cars could store energy in their carbon fiber bodies

Jon Fingas, @jonfingas
10/21/18 [Transportation](#)



Electric cars typically need larger, denser batteries if they're going to meet the range expectations of people used to gas-powered vehicles, but available space and weight limit the size of that battery. Researchers might have a solution: turn the very body of the car into a battery. They've conducted a study showing that carbon fiber shells could serve as battery electrodes. The trick is to optimize the size and orientation of the fibers so there's a good balance between stiffness and the electrochemical traits needed to store energy.

While the carbon fiber with battery-friendly characteristics is slightly stronger than steel, the scientists believed companies might need thicker layers to make up for the difference. However, that might be worthwhile. If a vehicle shell could collect, conduct and store energy, it could reduce the weight "up to" 50 percent, Chalmers professor Leif Asp said.

There's a catch, though: even in its existing

form, carbon fiber is expensive. While it's becoming more common, you still tend to see it in sports cars (plus some EVs) where price isn't as important as low weight and raw performance. EV makers might have to use carbon fiber sparingly if they want to provide the benefits of that battery storage without ridiculously high prices.

Source: [Chalmers](#), [IOP Science](#)
In this article: [battery](#), [carbonfiber](#), [ChalmersUniversity](#), [ChalmersUniversityofTechnology](#), [electriccar](#), [electricvehicle](#), [ev](#), [gear](#), [tomorrow](#), [transportation](#)



The Oil Industry Needs Large New Discoveries, Very Soon

Published in [Oil Industry News](#) on Wednesday, 3 October 2018



Market participants and analysts are all focused on the imminent oil supply gap that is opening with the U.S. sanctions on Iran just five weeks away.

But beyond the shortest term, a larger and more alarming gap in global oil supply is looming—experts forecast that unless large oil discoveries are made soon, the world could be short of oil as early as in the mid-2020s.

The latest such [prediction](#) comes from energy consultancy Wood Mackenzie, which sees a supply gap opening up in the middle of the next decade. At the current level of low oil discoveries and barring technology breakthrough beyond WoodMac's assumptions, that supply gap could soar to 3 million bpd by 2030, to 7 million bpd by 2035, and to as much as 12 million bpd by 2040.

It's not that discoveries aren't being made, they just aren't enough to offset the natural decline at mature fields while global oil demand is still expected to continue to rise.

The main reason for lower discoveries is that spending on exploration has drastically plunged since the 2014 oil price crash. The good news is, according to Wood Mackenzie, that the volume of new discoveries is correlated with spending on exploration. So if spend were to increase, the chance of more and major oil discoveries gets higher.

As early as the beginning of this year, WoodMac [said](#) that the share of exploration of upstream investment has

slipped to below 10 percent since 2016 and is not about to recover. "This could be the new normal, with the days of one dollar in six or seven going to exploration forever in the past," the consultancy said in its '5 Things to look for in 2018.'

Over the past year, however, exploration seems to have gotten "its mojo back," WoodMac [said](#) in June, noting that oil discoveries offshore Guyana continued to deliver more oil volumes, major high-value discoveries were made in the U.S. Gulf of Mexico, as well as on the Mexican side of the Gulf, by Shell, Chevron, Talos, and Eni.

The dramatic cut in spending, including on exploration, has done one good thing to the industry—it forced companies to realign strategies and look to do more with less. According to Andrew Latham, Vice President, Global Exploration at WoodMac, "this will be the first time in a decade the industry has actually created rather than destroyed value."

On the flip side, the oil industry is now finding less oil and gas than it used to, Latham noted.

So, "Fact is, we need more Guyanas, a lot more, and we need them soon," Simon Flowers, Chairman and Chief Analyst at Wood Mackenzie, said in a post last week.

The industry basically needs to replace one North Sea each year, as the world needs to replace 3 million bpd of supply decline from mature fields, while global oil demand continues to grow at a robust pace, the International Energy Agency (IEA) said in its [Oil 2018 report in March](#).

Global upstream investment—which includes exploration spending—has just started to rebound from the 2015-2016 lows, the IEA said in its [report](#) on 2018 world energy investment in July.

With the oil price crash, investment plummeted in 2015 and 2016 from the peaks in 2014, but last year's investment rebounded by 2 percent in real terms, the IEA said, expecting the same level of growth this year as well.

Companies are still keeping very tight discipline on capital expenditure and costs and are looking to reward shareholders with fatter dividends now that they are getting more cash from the upstream divisions thanks to the higher oil prices. But the industry as a whole can't afford to neglect spending on exploration because a supply gap may be lurking just around the corner.

Source: [oilprice.com](#)



Nov - 11 - 18, 2018, Ritz Carlton, New Orleans, LA

WHAT DESK AND DERRICK CLUB HAS MEANT TO ME

I first joined Desk and Derrick Club in Amarillo, Texas in 1975. My first job with an oil and gas company was Argonaut Energy in Amarillo. I started out as receptionist and part of my job was to take the morning drilling reports (by hand) which was like a whole new language to me. Thank goodness someone gave me a copy of the D&D Standard Oil Abbreviator, as an example dd meant dead but not that someone had been killed on the rig! From receptionist I was transferred to the production department. What an education learning all of the Railroad Commission of Texas rules and regulations as well as other state's regulations!

I moved to Dallas in 1981 and worked for a couple of oil and gas companies the last of which was Kasle Energy where I worked for 29 years. The company sold at the end of 2016, it was a small family owned one girl office so I learned a bit of everything to do with oil and gas.

I credit much of my oil and gas education to Desk and Derrick due to the monthly speakers informing us of every aspect of our industry and to the many seminars, fieldtrips and several courses I have taken over the years. As an example of fieldtrips I have had the privilege of touring several well drilling rigs as they were drilling and an off shore rig. I was actually at a rig when it experienced a blowout and that is an experience that I would NOT care to repeat.

Beyond the education I have received at the local level I have traveled from Alaska to Galveston and Washington DC to San Francisco to ADDC Conventions and many places in-between. I have also attended many Region Meetings both of which are held once a year.

There have been so many changes over the years and that is why I stay in Desk and Derrick in order to keep abreast of these changes.

I just can't describe the many good friends and acquaintances I've made in my 43 years in Desk and Derrick.

I have served as nearly every officer and many committees for that is an excellent way to get acquainted with other members. It is also a great way to learn what it takes to keep Desk and Derrick running smoothly! The camaraderie of Desk and Derrick is PRICELESS!

Submitted by

Pat Blanford



Wildcatters Still a Gamble for Investors Despite Oil's Rise

Published in [Oil Industry News](#) on Wednesday, 17 October 2018

Higher oil prices may seem like the pot of black gold at the end of the rainbow for wildcat explorers in frontier plays. But even with talk that prices of \$100/bbl could again be in sight, investors are wary before taking the gamble.

With crude above \$80/bbl small explorers are taking chances even when the price of failure is high. But investors have lost patience with risk-taking companies in recent years, says Anish Kapadia, an analyst for Hannam & Partners.

"There were a lot more funds that would hold these stocks five-plus years ago, for example a lot were held in the U.S.," Kapadia said. "But the size of these companies and lack of trading liquidity precludes many investors from holding them."

The latest example of the pitfalls for investors -- even with crude at a four-year high -- is Chariot Oil & Gas. This company was testing a hunch with its well over 4,000 m deep **offshore** Namibia -- a frontier play that has caught the interest of majors BP and Exxon Mobil, but remains largely unproven. The results didn't support the hunch which was "very disappointing," Chief Executive Officer Larry Bottomley said in an interview.

Chariot stock fell as much as 70% on Thursday after the results announcement. Bottomley tried to ease investor concern, saying the company is fully funded to make progress on assets in Morocco and Brazil. Analysts were less enthused.

"This failure is testament to the risk of wildcat exploration in relatively undrilled basins," Cantor analysts said in a note. "Whether investors would be willing to fund any further wildcat exploration by this company is the remaining question, and we think the track record of failure is likely to make survival difficult."

The company drilled the Namibia well because rig rates were low and it had equity financing, but it will now return to its regular method of forming partnerships, Bottomley said. "We would've never drilled the well if it would've destroyed the company," he said.

Namibia has attracted explorers on a bet that its coastal shelf has similarities to Brazil, where the **offshore** Tupi find in 2007 was the largest in the Americas in three decades.

Chariot has become one of the most committed explorers in Namibia. Two wells that missed in 2012 sank the stock almost 90%. Management changed tack a couple of years later, dropping a license and then getting it back. That

made the company a "fast follower," leaving others to take on the drilling risk, Bottomley said at the time.

It then broadened its portfolio, planning wells off Mauritania and Morocco, where they fell short of expectations again in April.

Risky business

Even for companies which strike oil or gas, such as Cobalt International Energy as part of a venture in Angola, the end result can still be bankruptcy.

Investors have been put off in general from funding small explorers after a series of failures, David Round, an analyst at BMO Capital Markets, said. There will always be room for them, even to go to frontier regions, "but we're really looking for other industry players to fund these types of things," he said.

Cove Energy Ltd is one of the success stories for small explorers, especially in Africa. In 2009 it acquired an 8.5% stake in an exploration block operated by Anadarko Petroleum shortly before a major discovery by the operator. The company was subsequently sold for almost \$2 billion.

"I think everyone hopes to be the next Cove, but the only one that really offers something like that is the Guyana blocks," said Ashley Kelty, a Cantor analyst. "That's the closest to Mozambique that we've had for a long time."

Tullow Oil has stakes in Guyana, which is why shareholders could shake off the well they missed in Namibia last month, he said. Eco Atlantic Oil & Gas also has stakes in both plays and its stock is up 80% this year. Hannam analysts are watching for the appraisal of Exxon's Hammerhead discovery in Guyana, which extends onto Eco's block as a possible "catalyst" for the company.

Chariot will now face increasingly impatient investors. In a September results call, Bottomley was already asked if he could understand their frustration as wells continued to miss.

"A dry well is just as painful to us," he said. "We've invested our time, talent and effort and it's something that we're very close to, and so, yes, we do -- we do -- we do feel that -- that pain."

Source: www.worldoil.com



September 2018 President's Letter

Graham Desk and Derrick Club

Stand Up and Speak Up

As I'm writing this letter, we are receiving some much-needed rain, and I know we are all very thankful for it. I hope everyone had a great Labor Day weekend. We enjoyed our time with family, and I would never give up a holiday, but fitting a five-day work week into four days is tough!

I have two questions for all our members.

1. What is your favorite thing about being a member of Desk and Derrick?
2. If you could improve one thing about Desk and Derrick, what would that be, and why?

Send me an email with your answers. I'm interested in the responses for a few reasons, but the main one is to see how many people read this letter.

Our club has a lot going on over the next few weeks, so you don't want to miss any of the meetings. The 60th Annual Graham D&D Classic golf tournament is September 14, and your help is needed. The golf committee will give their report at the September meeting, and they will be available to answer any questions.

The 2018 ADDC Convention is at the end of September, and in addition to all the board positions being contested, there are several proposed amendments to the bylaws and standing rules. At our meeting in September, our club will direct our delegates in the way votes should be cast.

Our Industry Appreciation Banquet is Tuesday, October 9. Be on the lookout for your invitation. This is going to be such a fun one, and I know we are all excited to honor our employers and to celebrate our year.

Our field trip committee is planning a fun trip for us, and we will learn more about that at our September meeting.

Finally, our nominating committee has a slate of officers for the 2019 year, and this will be presented to the club at the September meeting. Our election will be held at our November meeting.

I look forward to seeing everyone at our meeting Tuesday, September 11, 5:30 PM at Potter's Pizza!

Stand Up and Speak Up,

Sonya Edwards





The Lone Star Desk & Derrick Club of Dallas held its 5th Annual Lone Star Shoot Out on September 28, 2018 at Elm Fork Shooting Sports in Dallas, Texas. This year's shoot turned out to be a record breaking event with the largest number of teams since the club's inception.

Eighty shooters took part in the charitable challenge with the Schlumberger team taking the first prize trophy. All teams received an ammo vest emblazoned with the Lone Star Shoot Out logo on the back and Steward Energy and EC Energy logos on the front while Headington Energy provided caps for each shooter. Participants also played a round of shotgun golf with a top prize of \$100 cash and drew up their sleeves for a gun raffle (raffle tickets were as long as your arm). Breakfast was sponsored by Argent Mineral Management and lunch was sponsored by Hunting, International.

Not only was this year's event a great networking opportunity for all participants and volunteers but it has raised scholarship funds for several students studying in energy related fields. Last year's clay shoot garnered six \$1,000 scholarships and Lone Star expects to exceed that marker this year.



Desk and Derrick Club of Corpus Christi

We welcomed our 2019 Board of Directors at Tuesday's Luncheon. Thank you to those who attended and enjoyed the Oil Men Tales from the South Texas Oil Patch video with us. We hoped you learned something new! We look forward to seeing you at our next Luncheon!



A Hypocritical “Hero”

03/15/2018

AUSTIN - News organizations are welcome to post or publish this editorial by Railroad Commissioner Wayne Christian in their respective publications or websites.

A Hypocritical “Hero:

Arnold Schwarzenegger is undoubtedly best known for his legendary heroics on the silver screen. Covered in mud, he survives the Predator – killing it by exploiting its one weakness. As the Terminator, he protects John Connor from a homicidal shape-shifting machine to save humanity. An unhappy construction worker, he can’t remember who he is, but finally recalls and with his last breath saves thousands of lives by releasing air into the Martian atmosphere.

Like the character he played in *Total Recall*, Mr. Schwarzenegger must be having a tough time remembering who he is – a former Republican Governor.

In Austin for the South by Southwest festival, he revealed he has hired a team of California lawyers to sue oil and gas companies for “first degree murder” by “knowingly killing people all over the world.” Instead of acting like a Republican, Mr. Schwarzenegger must be trying to play the hero again. The only problem is this isn’t the movies, this is real life, and there is nothing to “save” us from.

Like many of us, Mr. Schwarzenegger had a long commute to work. After he was elected Governor of California, he decided not to move to the Governor’s Mansion at the state capitol in Sacramento, but instead traveled more than 100 miles for seven years from his mansion in Brentwood, Calif.. The only difference: he took a private jet, which cost around \$30,000 a roundtrip and impacts the environment about the same amount as a small car does in three years. And when he’s not taking a private jet to work, he’s driving around in a five-ton, 12-mile to the gallon Mercedes or going to lunch in a military-grade Hummer.

But now, according to the *Governator* it’s “absolutely irresponsible” for oil and gas companies to sell their products because they “know [their] product is killing people.” Wait a minute, here. So, it’s okay for oil and gas companies to sell their products to Mr. Schwarzenegger when he needs to fill up his private jet or Hummer, but it’s not okay for them to sell their products to regular folks so they can drive their vehicles to work? This kind of do-as-I-say-not-as-I-do hypocrisy is repulsive and offensive. Mr. Schwarzenegger is not a hero, he’s just another elitist Hollywood hypocrite telling you and me how to best live our lives.

The real heroes are the oil and gas workers – the landman, the roughneck, the petroleum engineer – who wake up every day and go to work to support their families and our way of life. Together, these workers produce around 10 million barrels of oil and 96 billion cubic feet of natural gas each day that fuel our cars, light our homes, and make plastics and many other items we use every day. The industry doesn’t just provide the raw materials to make the things we need – it creates jobs and grows our economy. In 2015, the oil and gas industry supported more than 10 million jobs in the United States with an average salary over \$100,000 and contributes more than \$1 trillion to our economy every year.

Despite what Mr. Schwarzenegger may think, the story of energy before oil and gas was simple – most work was done by human or animal muscle. This caused the vast majority of the population to live short lives of hard labor in extreme poverty. Before oil and gas were used to power the industrial revolution, the global average life expectancy was only 25 years old with 30 percent of children dying before age 15. During the 1800s, 80 to 90 percent of the population of the United States worked in agriculture and spent 74 percent of family income on food, clothing and shelter. Today, the average person lives more than three times longer than the average person in 1800. This is partly because climate-related deaths, such as starvation or hypothermia, have decreased 98 percent in the United States since the use of oil and gas became widespread at the beginning of the 20th Century.

It’s sad – but Mr. Schwarzenegger has gone from superstar hero to Hollywood hypocrite. On the one hand he routinely uses gas-guzzling jets and cars while on the other he sues oil and gas companies. Given this stunning hypocrisy, I have a question. If oil and gas companies are murderers for selling their ----product, does that make Mr. Schwarzenegger an accessory for being such a good customer?

Region IV at the 2018 ADDC Annual Convention and Educational Conference



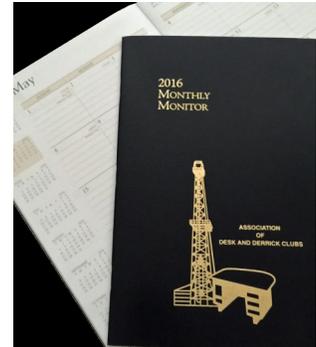
Get YOUR 2019 ADDC Monitor NOW

The Desk and Derrick Club of Dallas is once again selling the Association of Desk and Derrick Clubs' 2019 monthly monitors with the Desk and Derrick logo. These calendars are the perfect way to keep track of Club activities, member and family birthdays, and all those special events throughout the year. The two-page format provides plenty of space to jot down reminders and appointments, too!!

GREAT GIFT IDEAS.....

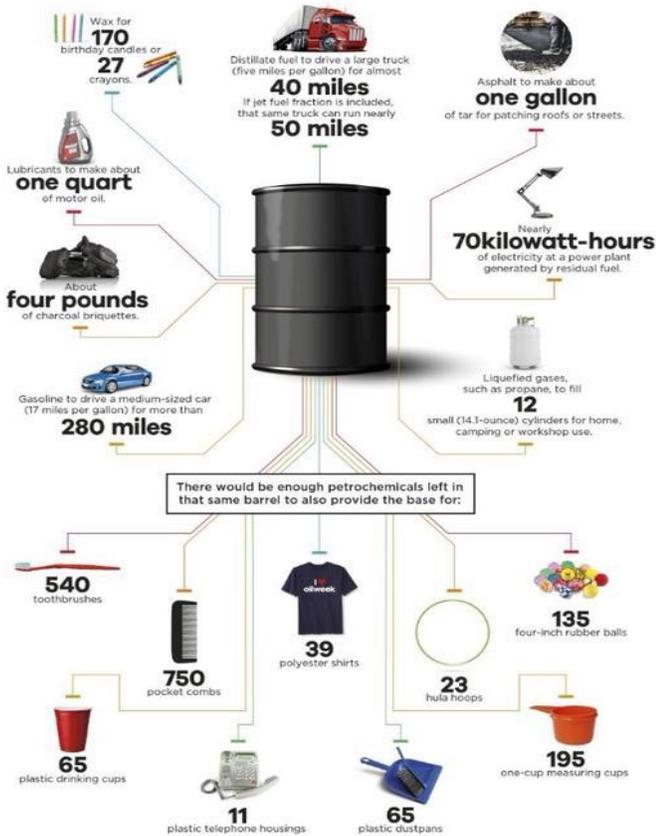
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sfigueroa@excoresources.com**



What can you make from one barrel of oil?

Researchers broke down a typical barrel of domestic crude oil into what could be produced from it. The average domestic crude oil has a gravity of **32 degrees** and weighs **7.21 pounds per gallon**. Here's what just one barrel of crude oil can produce:



The lighter materials in a barrel are used mainly for paint thinners and dry-cleaning solvents, and they can make nearly a quart of one of these products. The miscellaneous fraction of what is left still contains enough byproducts to be used in medicinal oils, still gas, road oil and plant condensates.
It's a real industrial horn of plenty.

Letter from the Editor,

With convention behind us we look forward to the coming year. What will it hold for us. This will be the year when many changes go into effect. No longer will we have numbered regions, but will be members of the Northeast, Southeast Central and Western Regions. There will no longer be a Vice President. Committees will be restructured, and the ADO office may disappear. It will be up to us to make sure that our great organization thrives again.

At the member luncheon this year at convention, I mentioned that we must all work together. Together we can turn things around. I challenge you this: Through the end of 2018 and into 2019, bring someone to a meeting. Share the insight with your employer. If we each bring one new member into the fold, by the end of 2019 our numbers can once again be above 2500.

We can do it. We each have something to give, we each are capable of so much. As I said at convention - Together we can do anything!

Until next month,

Maggi Franks

North Harris/Montgomery Counties Desk and Derrick Club
Program Summary
Submitted by: Melinda Montgomery

Fairway Energy Crude Oil Storage

Speaker's Biography

Mr. Dana Grams joined Fairway Energy in January 2016 as the Chief Commercial Officer. Dana is an executive with extensive experience in developing, operating and optimizing midstream energy assets, as well as a history of establishing and leading marketing and trading organizations.

For over 12 years, Mr. Grams was employed at AGL Resources (AGLR) where, in 2001, he co-founded Sequent Energy Management serving as Vice President of Asset Management. In 2004, he was promoted to the corporate office as Senior Vice President of Business Development for AGLR. From there he built Pivotal Energy Management and, as President of that business unit, led the initiative to purchase Jefferson Island Storage & Hub and develop Golden Triangle Storage, both facilities utilizing salt dome caverns. Under Mr. Grams, Pivotal also developed propane storage as well as acquired pipelines strategic to existing asset footprint.

Prior to his tenure at AGL, Mr. Grams was employed as Vice President of Trading for Shell US Trading, where he was instrumental in forming Coral Energy Resources. From 1990 through 1995 Mr. Grams served as Manager of Natural Gas Trading for Phibro Energy USA, where his responsibilities included refinery supply, marketing & trading in natural gas, and marketing propane and ethane for Phibro's Houston and Texas City Refineries (currently Valero).

Dana began his career in 1980 with the Natural Gas Pipeline Company of America serving as a Reservoir Geologist, assistant to the Vice President of Gas Supply, and Manager of Gas Acquisitions. He left the company as a District Manager in 1987.

Mr. Grams holds a Bachelor of Science degree in Geology from Texas A&M University and attended the United States Air Force Academy.

About Fairway Energy

Fairway Energy is a growth oriented crude oil storage business focusing on constructing and placing into service the Pierce Junction Crude Oil Storage facility. The business is strategically positioned as the only independent salt dome crude oil storage terminal in the greater Houston market area.

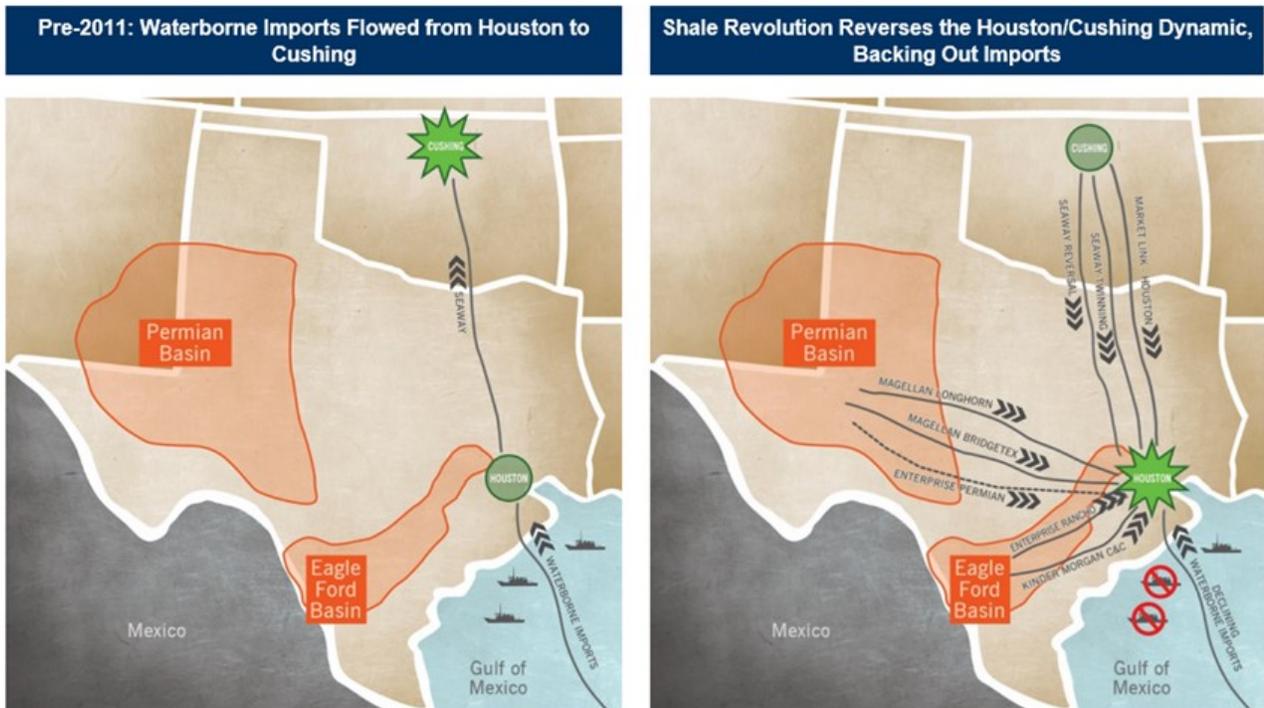
Fairway's Development Model

The Shale Revolution was a game changer in the petroleum markets. It brought about a new "Mother Lode" centered around both horizontal drilling and hydraulic fracturing.

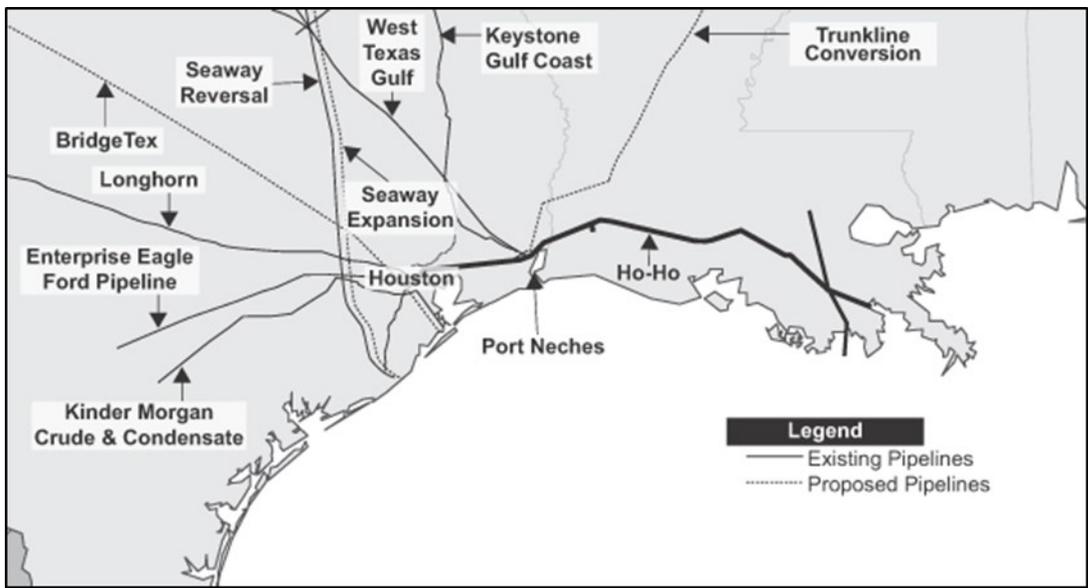
At the same time, the Permian Basin was rediscovered with new technologies being utilized. We saw the rise of the MLP model as well as a lift on the crude oil export ban. The Gulf Coast market was experiencing an evolution. Gone were the pre-2011 days of oil imports as the shale revolution had reversed that course.

Gulf Coast Market Evolution

North American Production Drives Pipeline Buildout to Houston



All roads now lead to Houston...



With the advent of the increased supply, came the need for additional storage capacity. The role of onshore storage includes:

- Replace waterborne vessel storage due to declining imports
- Buffer fluctuating refinery operations
- Stage volumes for waterborne export
- Perform offloading for waterborne imports
- Facilitate blending
- Transshipments

The Houston Market evolved from a one-dimensional usage of storage by refiners to a balanced mix of market participants who look to maximize the value of the barrel. Thus, began the story for Fairway.

Underground Storage Overview

Underground salt caverns have been used to store natural gas, compressed air, hydrogen, and liquid hydrocarbons (including crude oil) since the early 1940's. Salt is nearly impermeable to the flow of gas or liquid hydrocarbons, making the risk of product leakage from salt caverns extremely low. Salt will flow from high to low pressure, at depths typical of hydrocarbon storage caverns, giving it the ability to self-seal under cavern operating pressures. When storing liquid hydrocarbons in volumes greater than 500 Mbbls. salt cavern storage facilities have lower construction costs than surface tankage or conventionally mined storage caverns. These factors taken together make salt caverns the best choice for large volume hydrocarbon storage.



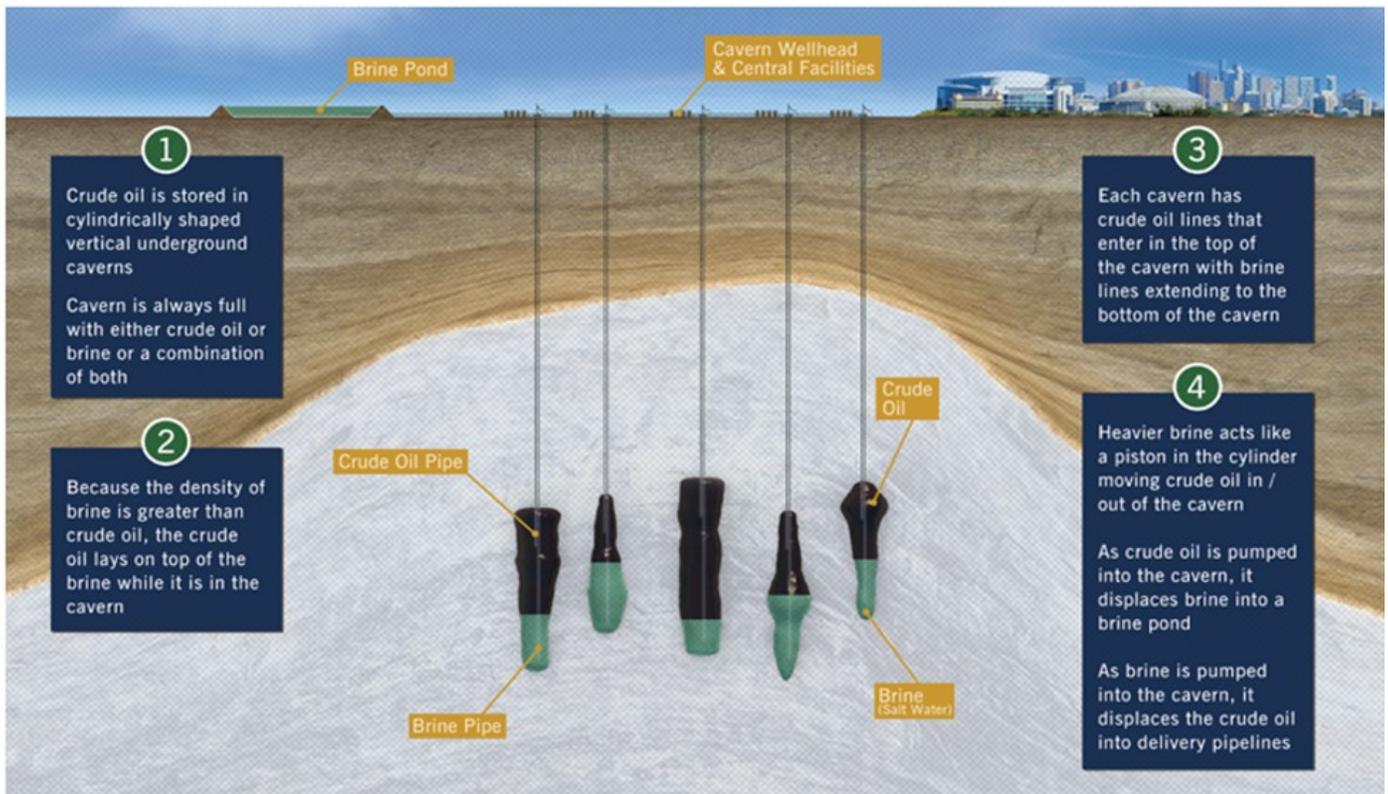
Cavern Drilling Program Commencing in the Shadow of the Houston Astrodome

Salt caverns are carved out of underground salt domes by a process called "solution mining." Essentially, the process involves drilling a well into a salt formation, then injecting massive amounts of fresh water. As the water dissolves the salt, a cavern is formed. Cavern development takes place over a period of years during which tens of millions of gallons of water are injected to dissolve the salt in a controlled manner.

The Department of Energy's Strategic Petroleum Reserve ("SPR") and the Louisiana Offshore Oil Port ("LOOP") currently use salt caverns as crude oil storage facilities.

Currently, Fairway Energy is focused on developing Phase 1A of the Fairway Crude Oil Storage Project which consists of three cavern systems with approximately 7 million barrels of existing cavern capacity. Phase 1A began service in April 2017 and has pipeline connectivity to the major crude oil hubs in the Houston market area.

Salt Cavern are Filled and Emptied Using Salt Water (Brine) to Displace the Crude Oil



Phase 1B will add an additional 2.6 million barrels of capacity. Construction is expected to commence late 2017 depending on customer commitments.

Phase 2 will consist of two additional cavern systems with approximately 9.0+ million barrels of existing cavern capacity. Phase 2 construction commencement date is to be determined.

Q: What size and shape are the caverns typically?

A: Cylindrical shape is ideal. Size needed is determined by economics. And capacity is measured using a sonar log. Fairway's caverns are approximately 300 feet in diameter and as deep as the Transco Tower is tall.

Fairway Crude Oil Storage Facility

Upon completion of Phase 1 and Phase 2, the Fairway Crude Oil Storage Facility will have nearly 20 million barrels of storage capacity across 5 underground salt cavern systems, with the ability to store all crude oil and condensate grades.

Phase 1A:

Commenced operations in April 2017

Three cavern systems with approximately 7.5 million barrels of storage capacity

Twin 24-inch bi-directional pipeline with connectivity to Genoa Junction

Genoa Junction

- Major receipt point for Eagle Ford shale and Canada/Mid-continent crude oil flows
- Primary distribution point for refiners in the Texas City and Baytown market areas
- Serves major waterborne terminals in Texas City
- Project is capable of simultaneously receiving and delivering over 15,000 barrels per hour per pipeline
- Project design consists of 1:1 ratio of brine pond capacity to crude oil storage capacity resulting in full cycling ability of caverns and de minimis loss of inventory

Phase 1B:

Additional 2.6 MMbbls of storage capacity and 4.5 MMbbls of brine pond capacity



Q: Did the recent hurricane flooding affect the facility?

A: The brine ponds which are filled with salt water and clearly visible from air due to the clear blue water did take on excessive rainfall. The fresh water is skimmed off the top and flushed safely down the sewer system following all regulations and checking/reporting salinity levels. However, the underground storage was not affected.

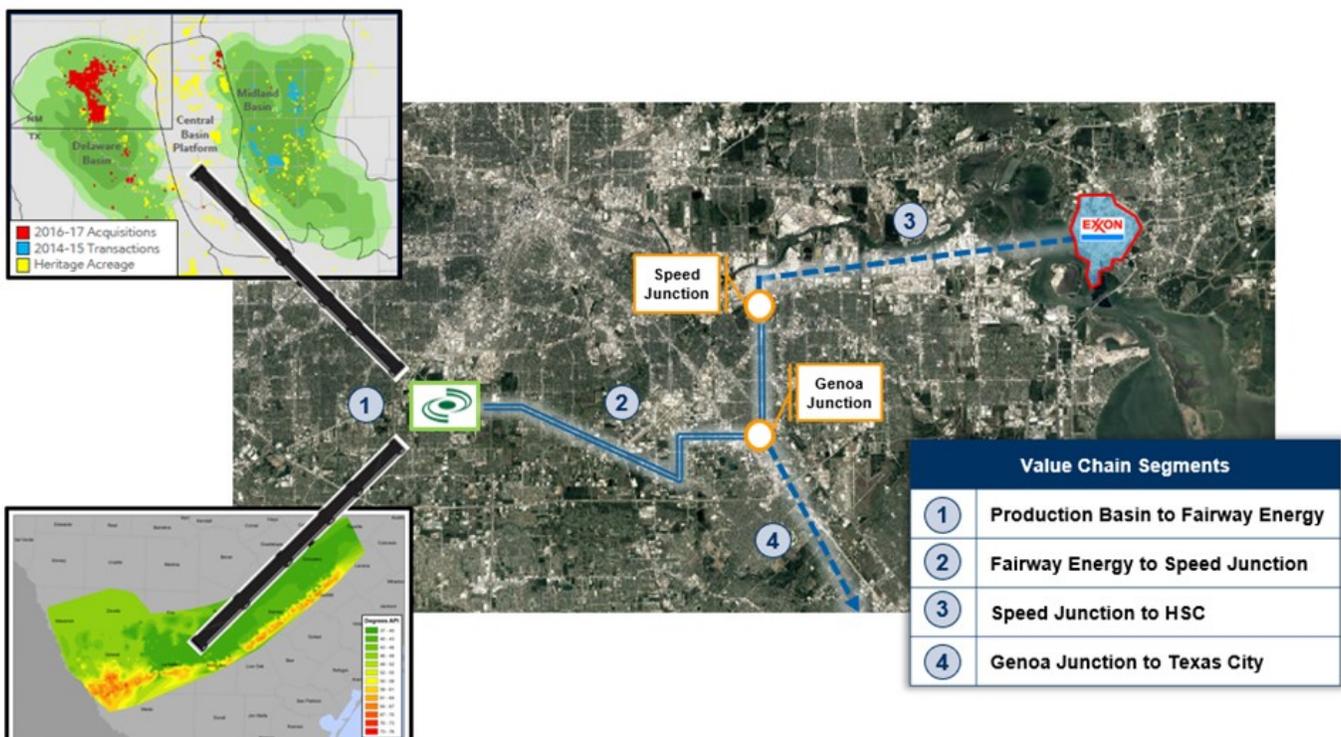
Traditional competitors like major pipeline carriers such as Magellan Midstream Partners, Enterprise Products Partners and Kinder Morgan cannot offer some of the advantages that Fairway does. They are an independent operator engaged solely in customer services. Their customers do not have inventories stranded or deal with “tank bottoms”; they offer 100% working capacity. And they have the ability to store multiple commodities in one existing site. By design salt cavern storage will have no volatile hydrocarbon emissions. Adverse weather-related risks (hurricane, flooding, lightning, etc.) are significantly reduced. And the electric motor-driven pumps result in no air emissions in a non-containment area.

Fairway has the advantage of controlling the “last mile” that connects the major junction points to the Houston Ship Channel markets referred to as the “value chain integration”. They already have in place the leases to build the connection segment number 3 below which is estimated to cost \$120MM. In addition, Fairway plans in the future to build their own competitive pipeline running from the Permian Basin to their storage facility adding yet another layer to the total system.

Houston has the largest concentration in North America for crude oil refining capacity with over 2.6 MM bpd. And with increased reliance on domestic oil production they are poised to take full advantage of their location relative to all major markets thus making them a valuable business for acquisition.

Value Chain Integration Supply

Total Value Chain Integration Connecting Production Basin to the Houston Ship Channel Markets



Tallgrass, Silver Creek expand combine to transport PRB production

HOUSTON, Oct. 16

10/16/2018

By OGJ editors

Tallgrass Energy LP, Leawood, Kan., and Silver Creek Midstream LLC, Irving, Tex., will expand their Powder River basin joint venture to own the Iron Horse Pipeline, the Powder River Express Pipeline (PREP), and crude oil terminal facilities in Guernsey, Wyo. Tallgrass will operate Powder River Gateway LLC with 51%. Silver Creek will own 49%.

Both Iron Horse and PREP will transport crude produced in the PRB from Silver Creek's Pronghorn Terminal to Guernsey, Wyo. where the crude oil has access to Tallgrass' Pony Express crude pipeline system and two other existing takeaway pipelines.

Iron Horse is a joint venture of Tallgrass and Silver Creek formed to transport crude oil from the PRB to the Guernsey oil hub ([OGJ Online, Feb. 8, 2018](#)). The 80-mile, 16-in. pipeline currently under construction will have an initial capacity of 100,000 b/d and is expandable to 200,000 b/d. It is expected to be in-service in first-quarter 2019. PREP is a 70-mile, 12-in. crude pipeline with a current capacity of 90,000 b/d expandable to 125,000 b/d. The crude oil terminal facilities in Guernsey collectively own more than 340 acres and include 370,000 bbl of crude storage currently in-service and, once fully constructed, will include more than 1 million bbl of storage. Powder River Gateway has existing interconnections to Pony Express, two other takeaway pipeline connections, and can access any other current or future markets at Guernsey.

Combining its existing system with its recent acquisition of additional PRB oil assets, Silver Creek will own and operate 120 miles of existing pipeline with over 330,000 acres dedicated from basin producers ([OGJ Online, Oct. 11, 2018](#)).

Tallgrass, which owns and operates Pony Express and is developing both the Seahorse Pipeline and Plaquemines Liquids Terminal projects, provides downstream market access for PRB producers.

The joint venture intends to create joint tariffs with Pony Express and Seahorse Pipeline, providing Iron Horse and PREP shippers transportation from Silver Creek's Pronghorn Terminal to Cushing, Okla., St. James, La., export markets through Plaquemines Liquids Terminal, and more than 3 million b/d of refining demand directly connected to Pony Express or Seahorse.

Additionally, Tallgrass is pursuing expansion projects on Pony Express over the next few years, with the initial pump upgrades coming online this year. Pony Express plans to launch an open season for additional expansion capacity out of Powder River Gateway's Guernsey facility in November.



Free the Market: No Taxpayer Subsidies, No Carbon Taxes - By Railroad Commissioner Wayne Christian

07/24/2018

Since being sworn-in as our 45th President of the United States, President Donald Trump has implemented an America-First energy strategy that has de-fanged an overreaching EPA, ended the Clean Power Plan, and removed us from the one-sided Paris Climate Accord, which threatened our national security, our nation's energy security and the economic growth that comes along with it.

As a result, the United States has regained its rightful place as a global energy leader. For the first time since 1972, the nation produced more than 10 million barrels of oil per day, and many believe we will surpass Saudi Arabia and Russia as the world's top energy producer in the next five years.

Regrettably, this progress is under attack. A Republican U.S. Congressman from Florida is attempting to undermine these hard-fought gains by proposing a carbon-tax on the American people. This carbon tax would increase the cost of gasoline for American families by more than 20 cents per gallon.

Much like former President Obama's Clean Power Plan, which would have increased the average Texan's power and gas bills \$1,060 annually, a carbon tax is a terrible idea because it harms American families and unfairly punishes one form of energy over others.

Unfortunately, picking winners and losers in energy is nothing new in our country. For example, the American taxpayer has been on the hook for so-called green energy taxpayer subsidies for years. In fact, right now, a Texan would receive a \$7,500 tax credit from the federal government and \$2,500 rebate from our own state government to purchase an electric car.

This is money out your pocket and mine, going to help wealthy environmentalists buy an \$82,000 Tesla. That's roughly \$23,000 more than the \$59,000 the average family makes in a year in the United States. It's no wonder Elon Musk is the largest recipient of taxpayer subsidies in our nation's history.

Boondoggles like Solyndra have highlighted the massive waste within the "green" energy movement. Yet we've done little to nothing to stop similar debacles from happening in the future. Inefficient, expensive, and unreliable sources of energy, like wind and solar, continue to receive taxpayer subsidies over significantly more efficient, affordable, and reliable sources, such as natural gas.

The inequality of these taxpayer subsidies is remarkable. Wind energy receives \$56.24 in taxpayer subsidies per megawatt hour and solar receives \$775.75. Natural gas receives 64 cents. This means wind is subsidized more than 878 times and solar more than 1,212 times than natural gas. Corporate investment follows these taxpayer subsidies, which is why companies keep adding more expensive wind and solar power to their "energy mix" – at the expense of hard-working Texas families.

But wind and solar aren't just expensive – they're also highly inefficient and extremely unreliable. Wind and solar only produce energy intermittently – when the wind blows, and the sun is shines – and it takes 40,000 acres of windmills and 10,000 acres of solar panels to produce the same amount of energy as 12.5 acres of natural gas. This has been done by our knows-what's-best-for-us politicians in Washington D.C. despite the tremendous amount of data that shows how enormously inefficient and unreliable these forms of energy are compared to oil and natural gas.

Implementing a carbon-tax on American families is a feel-good solution in search of a problem. The United States lowered its carbon emissions more than any other country in the world last year. That's the ninth time that's happened in the last eighteen years. This reduction is a direct result of technological advancement, such as fracking and horizontal drilling, and the increased use of natural gas. Punitive policies, such as carbon-taxes, do little to decrease carbon emissions, while increasing the cost-of-living for American families. It's all risk and no reward.

BINGO

BINGO! That is a word we heard ten times on July 27th. Since Lone Star does not have a Membership Meeting in July we replace it with our July Social. Our regular Membership Meetings are structured so the July Social is a great time for our members to visit and become better acquainted. Our Second Vice President Janet Beavers did an outstanding job of planning and executing this event! Thanks Janet!

El Fenix catered the meal with great Mexican food and it was BYOB so everyone greatly enjoyed getting to know each other better. Then we played BINGO. Ten games were played for prizes and some were luckier than others but still fun for all.

The party was held at EC Energy in Uptown Dallas in their wonderful offices. Our member Tammy Murchison is employed there and we want to thank Tammy and EC Energy for hosting this event. There were 13 members and one guest attending.

I can't wait until our July Social in 2019!!

Submitted by Pat Blanford



BINGO

Fort Worth maker of oil and gas Drill bits sells to Backstone for reported \$700 Million

Paul O'Donnell Business Editor Dallas News 10/23/18

The energy unit of private equity giant Blackstone is buying a Fort Worth company that makes drill bits used for oil and gas exploration.

Blackstone Energy Partners [said Tuesday](#) it will acquire a majority interest in Ulterra Drilling Technologies from affiliates of American Securities LLC. Financial terms were not disclosed, although [Reuters reported](#) the deal was worth around \$700 million.

The sale is expected to close by the end of this year.

Ulterra is one of the fastest growing drill bit manufacturers, doubling its revenue since 2016. It had the fifth-largest share of the global drill bits industry in 2017, bringing in about \$200 million in revenue, according to Reuters, which cited data from oilfield consultancy Spears & Associates.

With increased drilling and higher oil prices, oilfield services firms have been shopped around in recent weeks by their owners -- many of whom are private equity firms.

Ulterra CEO John Clunan and CFO Maria Mejia will remain in their roles at the 600-employee company, which has manufacturing plants in Fort Worth and Alberta, Canada. American Securities, which bought Ulterra from Esco Corp. in 2016, also will keep a minority stake in the firm.

Esco [paid \\$325 million](#) for the company when it bought it in 2012.

Eric Liaw, senior managing director of Blackstone Energy Partners, said in a statement that Ulterra is "poised to benefit from drilling activity, particularly in the most economic oil and gas plays in North America." Ulterra's bits are used extensively in the Permian and Eagle Ford shale plays.

The Permian Basin is the nation's largest oil producing region.



Department of Energy Announces \$53 Million in New Projects to Advance Solar Technologies

Energy.gov 10/23/18

Washington, D.C. – Today, the U.S. Department of Energy (DOE) announced selections for up to \$53 million in new projects to advance early-stage solar technologies. Through the Office of Energy Efficiency and Renewable Energy Solar Energy Technologies Office, DOE will fund [53 innovative research projects](#) that will lower solar electricity costs and support a growing solar workforce.

“Innovation is key to solar’s continued growth in our nation’s energy portfolio. It increases our energy diversity and reinforces our ‘all-of-the-above’ energy strategy,” said U.S. Secretary of Energy Rick Perry. “Developing new skills through workforce training is critical to expanding job opportunities in the renewable sector, which is why we are following through on our program to reach out to military veterans with new projects that will target this committed workforce.”

These selections will advance research and development in photovoltaics (PV) and concentrating solar-thermal power (CSP). While PV materials convert sunlight directly to electricity, CSP concentrates the incoming sunlight to heat that then generates electricity like a traditional power plant. The projects announced today span across 21 states plus the District of Columbia, and include PV research to increase grid resiliency in Puerto Rico. Selections are in the following areas:

[Photovoltaics Research and Development](#): \$27.7 million for 31 projects that will support early-stage research to advance new PV materials, like perovskites, which can essentially be painted on a surface to generate electricity. More innovation is needed to achieve high efficiency and stable performance over a long-time.

[Concentrating Solar Power Research and Development](#): \$12.4 million for 15 research projects that will advance the high-temperature components of CSP systems such as heat exchangers. These projects will develop materials and designs for collectors, power cycles, and thermal transport systems that can withstand temperatures greater than 700 °C while being corrosion-resistant. Next-generation CSP systems operating at higher temperatures will be able to store more heat and dispatch solar electricity at any time, day or night.

[Improving and Expanding the Solar Industry through Workforce Initiatives](#): \$12.7 million for 7 projects that will pursue initiatives to grow and train the solar workforce. These projects will support training and curriculum development at community colleges and advanced training for a more digital electric power system, which includes communications technology. This includes programs to prepare veterans and interested transitioning military personnel to join the solar workforce, building on DOE’s pilot program, Solar Ready Vets.



Coal Mines have canaries, frackers have mussels

Christine Lepisto 10/23/18

Freshwater shellfish serve as recording devices for fracking wastewater contamination.

In Pennsylvania, contaminated water created from recovery of oil and gas by hydraulic fracturing, or fracking, in the Marcellus formation was allowed to be discharged to publicly-owned wastewater treatment facilities under National Pollutant Discharge Elimination System (NPDES) permits. After treatment, the waters were discharged to the Alleghany River.

This practice continued from 2008 to 2011, when evidence came to light that fracking-related chemical contamination was on the rise in spite of the treatment. Authorities quickly [prohibited any further fracking discharge to the treatment facilities](#) after which the industry began recycling most of its wastewater.

Researchers at [Penn State](#) have now shown that freshwater mussels can be used to read the history of contamination from that period. They collected *Elliptio dilatata* and *Elliptio complanata* mussels, upstream and downstream of a NPDES-permitted facility as well as from rivers with no known fracking discharges. Nathaniel Warner, assistant professor of environmental engineering at Penn State explains what they were looking for:

"Freshwater mussels filter water and when they grow a hard shell, the shell material records some of the water quality with time. Like tree rings, you can count back the seasons and the years in their shell and get a good idea of the quality and chemical composition of the water during specific periods of time."



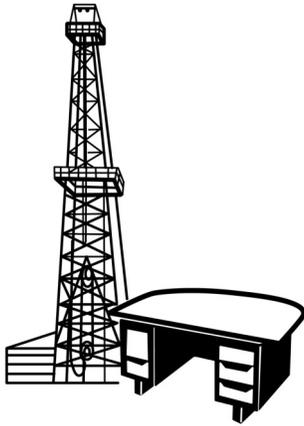
Sure enough, when they analyzed the shell composition layer by layer, they found that the downstream mussels showed significantly elevated levels of strontium, an element brought to the surface with the fracking waters. Not only that, the scientists could recognize the distinctive signature of the wastewater from the Marcellus shales in the characteristic values of strontium isotopes found (an isotope is a variation of a chemical element that has a different number of neutrons).

Surprisingly, the levels did not drop off as expected when the discharges stopped. This indicates that the contamination remains in the river sediments and can continue to affect the aquatic life for a long time. Warner emphasizes that, "the wells are getting bigger, and they're using more water, and they're producing more wastewater, and that water has got to go somewhere. Making the proper choices about how to manage that water is going to be pretty vital."

This work on the pollution record left behind in the shells of mussels could be of use for tracking spills and accidental releases from fracking operations as well. Next, the team wants to research the contaminants in the soft tissues, which could affect the fish and muskrats that [dine on the mussels](#).

The study, [Accumulation of Marcellus Formation Oil and Gas Wastewater Metals in Freshwater Mussel Shells](#) was published in Environmental Science & Technology. DOI: [10.1021/acs.est.8b02727](https://doi.org/10.1021/acs.est.8b02727)

About Our Association



MOTTO

Greater Knowledge—Greater Service

PURPOSE

The Association of Desk and Derrick Clubs (ADDC), an international non-profit organization, is a premier provider of energy education and professional development. ADDC's purpose shall be to promote the education and professional development of individuals employed in or affiliated with the petroleum, energy and allied industries, and to educate the general public about these industries as well as the companies and global communities the members serve.

MISSION STATEMENT

Our mission is to enhance and foster a positive image to the global community by promoting the contribution of the petroleum, energy, and allied industries through education by using all resources available.

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