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# University of Texas study estimates 10B recoverable barrels of oil in Eagle Ford patch

By Jennifer Hiller | September 13, 2016 | Updated: September 13, 2016 9:43pm

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#### IMAGE 1 OF 10

Ronnie Gebauer talks on his phone Tuesday September 13, 2016 during Hart Energy's DUG Eagle Ford conference at the Henry B. Gonzalez Convention Center. Topics include how companies are financing their drilling ... [more](#)

The once-mighty Eagle Ford Shale oil patch is on its heels, on track for the lowest amount of drilling activity in six years, and getting outshined by another, bigger field, the Permian Basin in West Texas.

But scientists Tuesday painted a vastly expanded picture of the Eagle Ford: as a place where at least 80,000 more wells will be drilled and companies could recover 10 billion barrels of oil at today's prices.

The University of Texas at Austin's Bureau of Economic Geology released new, unpublished research on the field at Hart Energy's DUG Eagle Ford conference in San Antonio on Tuesday.

Scott Tinker, bureau director, and Svetlana Ikonnikova, an energy economist there, said the 400-mile South Texas field has seen just a fraction of its ultimate activity. UT expects 100,000 wells in the Eagle Ford, far more than the 17,000 wells have been drilled so far, according to the Railroad Commission of Texas.

Tinker called the estimate is conservative. "That's today's technology, today's price. Technology doesn't stop," Tinker said. "The hydrocarbons are here and the demand is here, and is not going away."

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Ikonnikova said the number could rise by another 30,000 to 35,000 gas wells if natural gas prices rise enough that the southern band of the field, which holds deep, dry gas, become profitable.

The university has been studying shale gas production and reserves across the U.S., but this latest phase of the study looks at two shale oil fields, the Eagle Ford in South Texas and the Bakken formation in North Dakota. The study considers every square mile of the field and analyzes factors such as energy prices, the cost of drilling and completing a well and the impact of regulations. The results will be published in various peer-reviewed papers over the next six months.

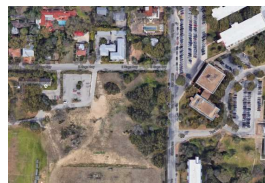
The Eagle Ford holds an estimated 230 billion barrels of oil, though just 10 billion can be recovered now, according to the latest research. UT estimates it also has 462 trillion cubic feet of natural gas, with 34 trillion cubic feet recoverable. The study considered the lower and upper layers of the Eagle Ford, but not the Austin Chalk, where many companies are drilling now.

It's the first time the university has put a number on the estimated amount of oil and gas the field holds.

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The ultimate potential of the Eagle Ford stands in contrast to the current mood of the field, which has been battered since oil busted. The price of a barrel of crude oil fell to \$45.71 Tuesday, and is down from a peak of \$107 in June 2014. Much of the talk at Tuesday's conference was about drilling wells faster and with longer horizontal reaches that will produce more oil - basically technical ways to pinch pennies.

Chris Heinson of Sanchez Energy said the company's costs per well have dropped from \$7.4 million in 2014 to \$3.3 million now, with their cheapest South Texas wells coming in at \$3 million.

Dale Kokoski, regional vice president of the Eagle Ford for Houston-based Marathon Oil Corp., said the field had switched from a period of "hyper growth" into one where companies have to carefully manage their business. Kokoski called production engineers, who squeeze the most oil possible out of existing wells, the newly important people in the office "who can't walk past a nickel."

That's a big change for the field.

Trade journals have started throwing around words like "optimization" in an oil field, which Kokoski said was a nice way of saying, "Boys, the party's over."

"I'd like to think there's at least a few more champagne bottles with corks ready to pop," Kokoski said.

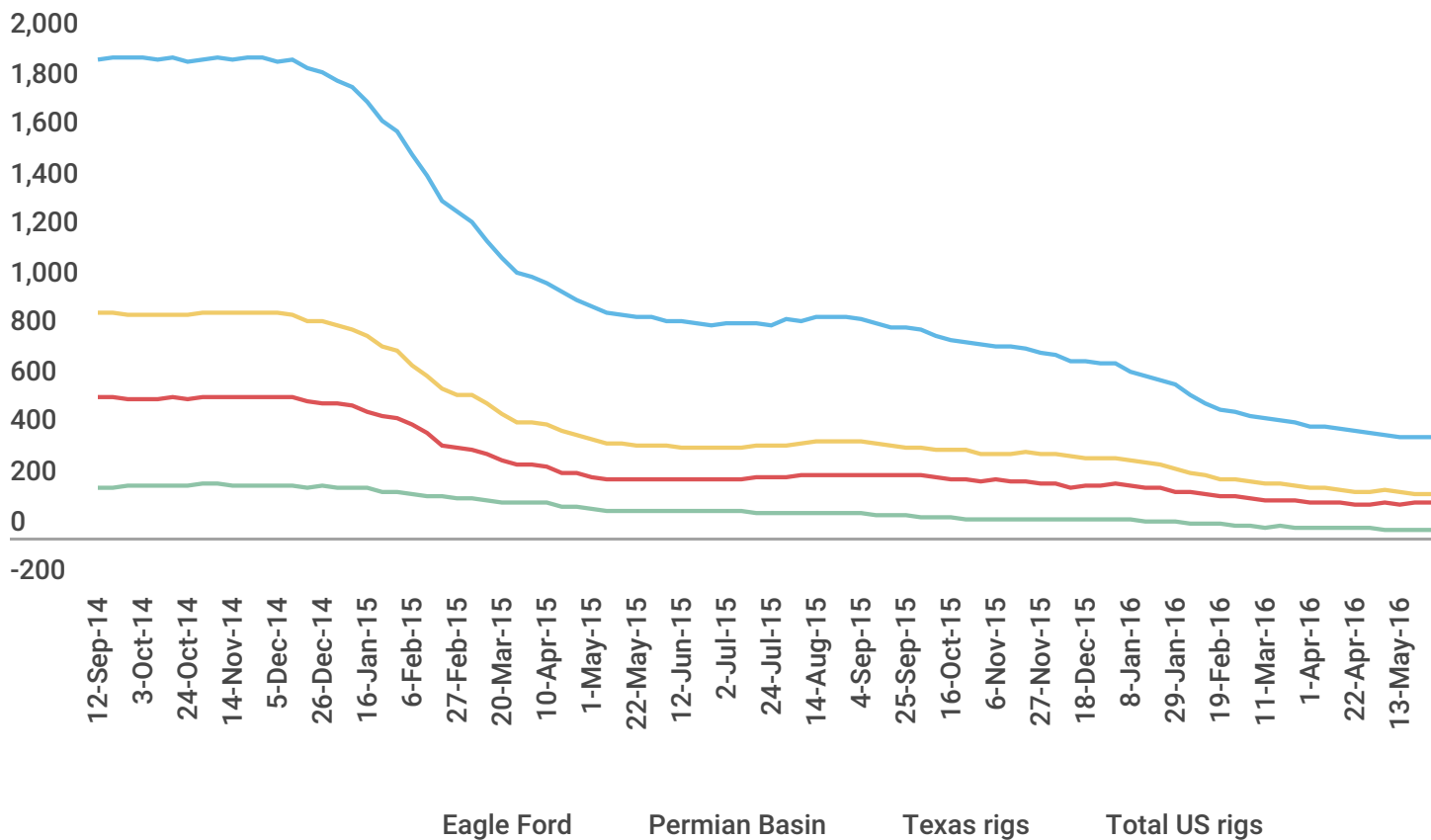
Refracking - going back into existing wells to frack them again - has potential in the Eagle Ford and has been much discussed in the industry, though it hasn't yet become a widespread practice, Kokoski.

For now, drilling activity is dropping in the field as companies pull back spending or send rigs to West Texas. Just 642 drilling permits were filed in the Eagle Ford as of August, down from more than 5,600 in 2014.

## Drilling rig counts in the U.S.

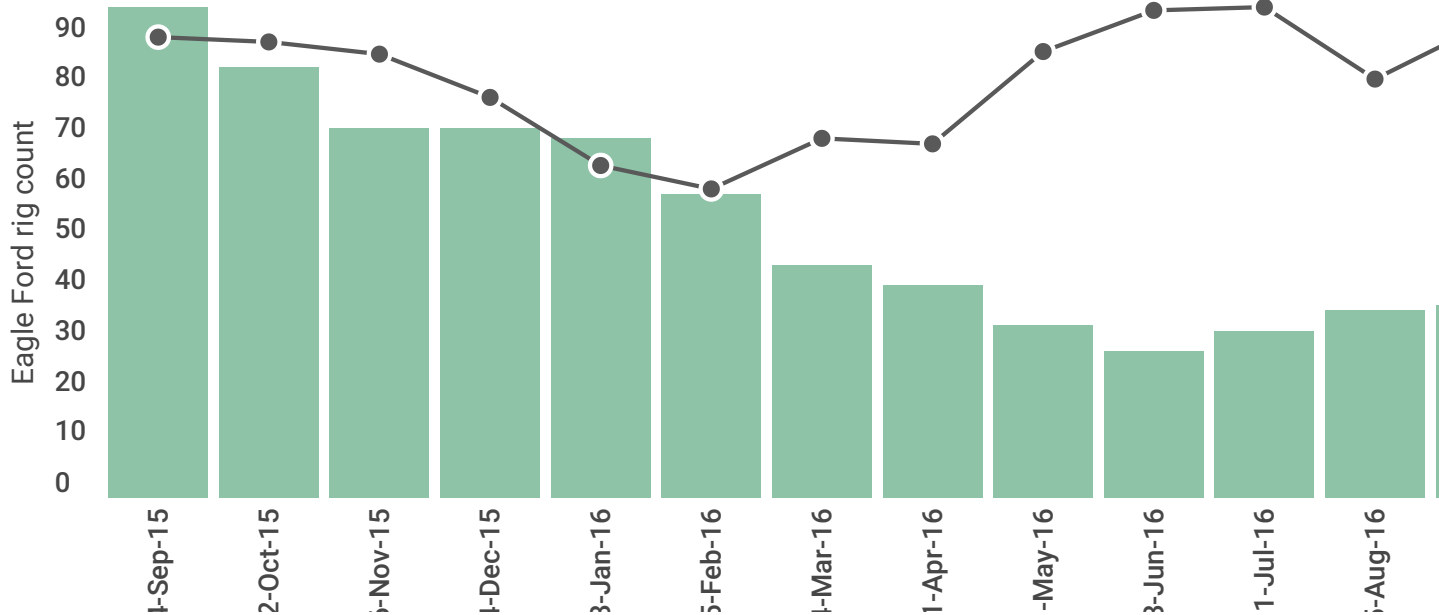
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Explore regional, state and national rig counts with the chart below. Hover over the line for a sp number of rigs by date.



### Oil prices and rig counts

Follow the cost of crude oil (gray line) as the number of Eagle Ford rigs fell over the past year (green)



Eagle Ford rig count

WTI crude price (dollars)

Source: Baker Hughes rig count

Created by LeAnna Kosub | Senior web producer, [expressnews.com](http://expressnews.com)

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The lack of new drilling is dragging down production. Eagle Ford production peaked at 1.7 million daily barrels in March 2015 and has been sliding ever since. It's expected to pump 981,000 barrels daily in October, down 46,000 barrels per day from this month, according to a report this week from the U.S. Energy Information Administration.

Attention and excitement have shifted to West Texas and eastern New Mexico, where the Permian Basin is on the climb. The Permian expected to produce 1.99 million barrels daily in October, up 22,000 daily barrels from this month. That would be the highest level of oil production from the Permian in more than a decade.

The Eagle Ford, meanwhile, might be circling back to an old standby, natural gas, which drillers were originally targeting in 2008 before they focused their sights on oil.

Oil has been the dominant story of the field. Historically high prices that hovered in the \$100 per barrel range from 2010 to 2014 created an unprecedented oil boom in South Texas.

But the Eagle Ford sits in a good geographic position for natural gas, which is in demand in plants along the Gulf Coast and in Mexico.

Mexico hasn't been able to develop its own oil and gas fields quickly enough to keep up with demand as its economy grows and electricity generation switches from fuel oil to natural gas. Enter Texas, which has an abundance of cheap natural gas to send across the

border.

“Mexico is giving some Eagle Ford gas producers an outlet,” Beatriz Camarena Maney, principal of Clearinghouse International, said at the conference. The Eagle Ford, in particular, is well positioned because Pemex pipelines across the Texas border have spare capacity to carry more gas, she said.

Mark Sooby of Bank of America Merrill Lynch also said gas producers in the Eagle Ford will benefit from the appetite for natural gas in neighboring Mexico, as well as the mothballing of U.S. coal plants and a switch to natural gas for electricity generation, and the export of liquefied natural gas, or LNG, which started this year along the Gulf Coast.

“The Eagle Ford is not a bad place to take advantage of all of those things,” Sooby told the audience.

Mark Meyer of Tudor Pickering Holt & Co. expects natural gas prices to rise next year, creating more of an incentive to produce gas in the field. “You’ve got regionally advantaged natural gas in the Eagle Ford,” Meyer said.

Many expect oil prices to move up in the next few years. While the world is swimming in too much oil now, Sooby said global demand will require an additional 9 million barrels of oil daily by 2020.

When prices rise, companies have plenty of work backlogged. They’ve drilled but haven’t fracked more than 5,000 wells across the country during the downturn, choosing to wait for better days to send oil and gas to market, according to the EIA. The backlog includes 1,261 wells in the Eagle Ford and 1,348 wells in the Permian Basin.

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