

USGS estimates 8.5 billion barrels of oil in Texas' Eagle Ford Group

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USGS researchers drill a research well located on the south side of U.S. 90, 7.1 miles east of Brackettville, Texas. This core was drilled by USGS during field work for an oil and gas assessment for the Eagle Ford of the Gulf Coast Basins. Cores like these provide information on the various rock layers, such as their make-up, their age, etc. The borehole, core, and logging suite are the third in a series of wells in the Austin -- Eagle Ford for use in our USGS Energy Program regional oil and gas assessments. Credit: Stan Paxton, USGS

The Eagle Ford Group of Texas contains estimated means of 8.5 billion barrels of oil, 66 trillion cubic feet of natural gas, and 1.9 billion barrels



of natural gas liquids, according to a new assessment by the U.S. Geological Survey. This estimate consists of undiscovered, technically recoverable resources in continuous accumulations.

The Eagle Ford Group stretches from the Texas-Mexico border to the west, across portions of southern and eastern Texas to the Texas-Louisiana border to the east. It is one of the most prolific continuous accumulations in the United States, and is comprised of mudstone with varying amounts of carbonate.

"Texas is so well-known for its oil and gas endowment that it's almost synonymous with petroleum," said USGS Director Dr. Jim Reilly. "In fact, the shale boom that has reinvigorated the Nation's energy industry began in Texas. That development is why it's so important that we regularly reassess potential resources around the country, because what's technically recoverable changes as new techniques are pioneered."

The Eagle Ford Group has long been known to contain oil and gas, but it was not until 2008 that production of the continuous resources really got underway in East Texas.

"This assessment is a bit different than previous ones, because it ranks in the top 5 of assessments we've done of continuous resources for both oil and gas," said USGS scientist Kate Whidden, lead author for the assessment. "Usually, formations produce primarily oil or gas, but the Eagle Ford is rich in both."

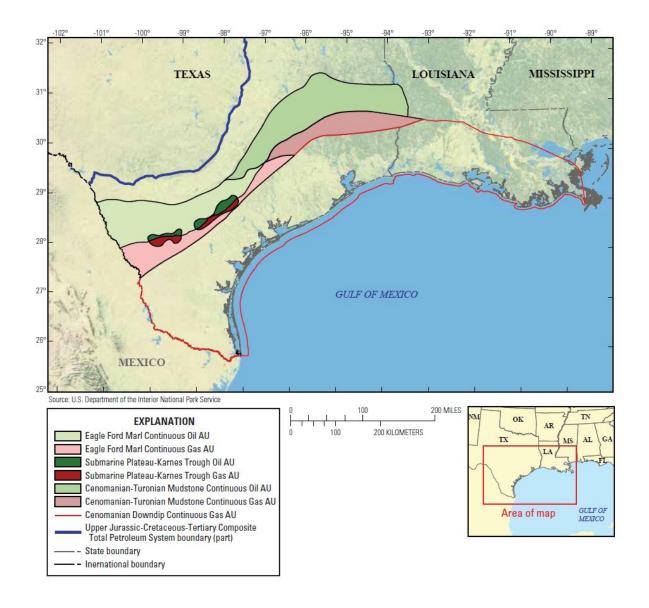
Continuous oil and gas is dispersed throughout a geologic formation rather than existing as discrete, localized occurrences, such as those in conventional accumulations. Because of that, continuous resources commonly require special technical drilling and recovery methods, such as hydraulic fracturing.



Undiscovered resources are those that are estimated to exist based on geologic knowledge and statistical analysis of known resources, while technically recoverable resources are those that can be produced using currently available technology and industry practices. Whether or not it is profitable to produce these resources has not been evaluated.

The USGS is the only provider of publicly available estimates of undiscovered technically recoverable oil and gas resources of onshore lands and offshore state waters. The USGS assessment of the Eagle Ford Group was undertaken as part of a nationwide project assessing domestic petroleum basins using standardized methodology and protocol.





Assessment units of the Eagle Ford Group within the Gulf Coast Basins. Credit: USGS

More information: Katherine J. Whidden et al. Assessment of undiscovered oil and gas resources in the Eagle Ford Group and associated Cenomanian–Turonian Strata, U.S. Gulf Coast, Texas, 2018, (2018). DOI: 10.3133/fs20183033



Provided by United States Geological Survey

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