BAKKEN SHALE

Formation's 'substantial' oil needs higher prices — report

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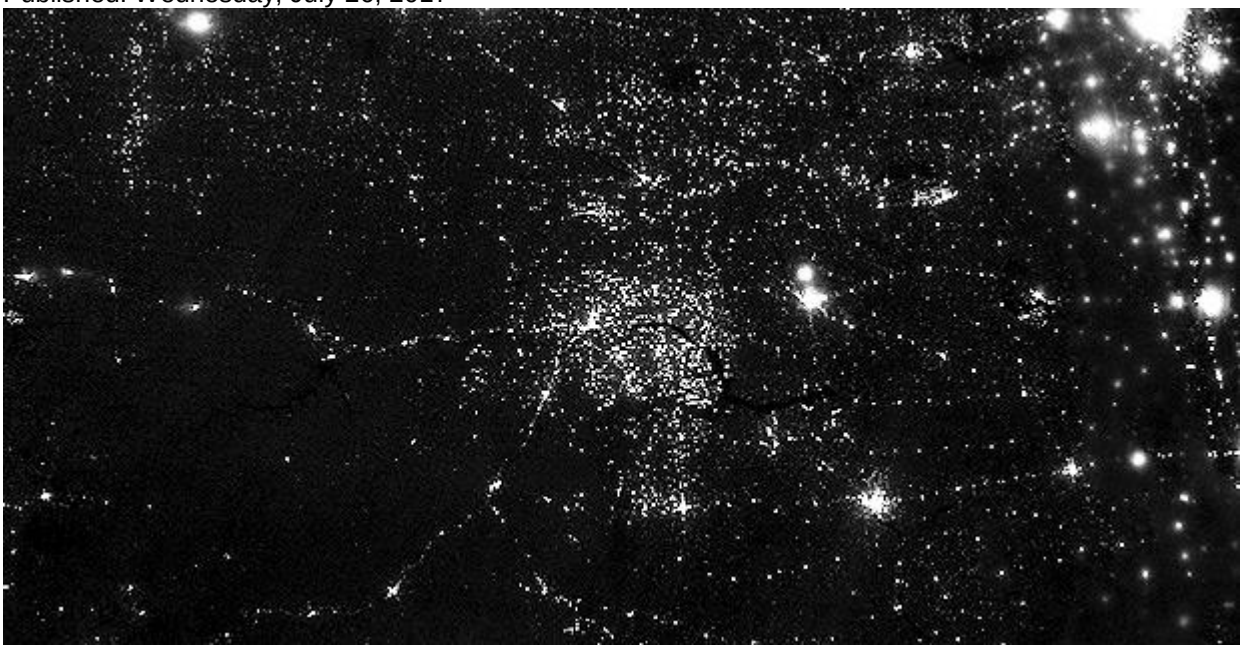

Flares from the Bakken Shale oil field are seen in this satellite photo. NASA Goddard Space Flight Station/Flickr

Geoscientists at the University of Texas, Austin, say they've completed a top-to-bottom assessment that confirms North Dakota and Montana's Bakken Shale'e enormous oil potential.

The UT Jackson School of Geosciences' Bureau of Economic Geology (BEG) says detailed findings will be published in various journals in the coming months. But in a teaser released at the Unconventional Resources Technology Conference in Austin yesterday, BEG's geologists predict that the Bakken and Three Forks formations in North Dakota and Montana will be producing shale oil for decades, with ultimate recovery depending on the oil price.

The university researchers find that the Bakken Shale "will remain a substantial contributor to U.S. oil production for several decades through a range of projected oil prices," according to the study overview.

The U.S. Energy Information Administration sees little to no growth in output from the Bakken through the end of 2018, but much hinges on the oil price.

The BEG study finds that with crude prices at around $100 per barrel, the oil and gas industry could add up to 60,000 new wells in the Bakken and Three Forks "with production increasing to 1.5 million barrels per day."

But with crude prices closer to the $40-per-barrel range, the study finds that new wells will be added but on a much lighter scale, causing eventual total oil output to decline in the Bakken. Crude at $40 could entice drillers to add only 14,000 new wells, extracting about half the total volume of oil that would have otherwise been captured at the higher oil price range, the study concludes.

The new Bakken study, funded by a grant from the Alfred P. Sloan Foundation, is one part of a larger assessment of shale oil resources in the U.S.

The BEG undertook a series of in-depth studies into the shale gas potential of fields across the United States. Geologists there have since shifted their attention to tight and shale oil, and they are largely confirming the resource potential estimated by government researchers at the U.S. Geological Survey.

BEG spokesman Mark Blount confirmed in an email that a team of geologists there are working to get a handle on the ultimate resource potential of the Permian Basin. The Permian is a complex blend of

multiple stacked layers of oil-bearing rock, sometimes shale and sometimes more complex tight geologic formations. The university team is partnering with the industry to fund and conduct research there, Blount said, in a multiyear joint partnership called the Tight Oil Resource Assessment (TORA).

"TORA is a joint Bureau-Industry project, and there are a number of industry partners committed to annual financial support and information-sharing," he explained. "We are beginning with research into a limited number of formations in both areas of the overall Permian Basin, the eastern Midland Basin and the more westerly Delaware Basin."

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