

Understanding Hydraulic Fracturing: Issues, Challenges, and Regulatory Regime

June 8, 2016

RELATED PRACTICES Energy, Power and Natural Resources

The substantial growth of domestic unconventional shale (fine grained sedimentary rocks that can be rich sources of oil and natural gas) resources in recent years has largely been the result of the increase in the use of hydraulic fracturing (also known as "frac'ing," "fracking," and, in this Note, "fracing"). Hydraulic fracturing is generally viewed as a completion technique that is a practical necessity to promote the development of unconventional "tight" shale reservoirs, particularly gas shale. It entails treating water, oil, or gas wells to stimulate more production than otherwise would have been achieved using standard drilling and production techniques.

Fracing was first tested in 1903 and used commercially in Texas in 1948 to create artificial permeability in an oil-bearing formation consisting of a thick geological deposit with little or no permeability. By 1988, hydraulic fracturing had been applied to one million wells. This methodology has also been used to enhance production from water wells. In the past decade, hydraulic fracturing has unlocked oil and natural gas deposits in deep shale formations around the country. About 35,000 wells per year currently undergo some measure of hydraulic fracturing, and a majority of oil and gas wells have undergone some form of fracturing during their productive lifetime.

Excerpted from Practical Law. To view the full article, [click here](#). (Subscription required)