

Multi-Stage Fracturing of Horizontal Wells in the Bakken

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A number of methods have been used to stimulate horizontal wells in the Bakken Formation since horizontal drilling has become commonplace in the Williston Basin. Most of the frac techniques utilize some form of open-hole completions, and fluid, jetting, or sand slug diversion. A series of wells have now been completed in the Bakken Formation utilizing mechanical activated open-hole packers and Fracport tools. The wells have performed substantially above average for the field, and show significant reduction in water cut compared to offsetting wells. The key objective in the system utilization is to provide mechanical diversion, precision placement of frac stages, and complete “toe to heel” stimulation of the horizontal borehole. This paper will present case history information describing the system design, deployment, and job execution in the Bakken Formation in the Williston Basin.

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