Schlumberger

Operator Produces 19,000 bbl More Early Oil by Improving Cementing

Wells cemented with Fulcrum technology produced 22% more oil in the first month as compared with the operator's conventionally cemented wells, Colorado

An operator cements nine new wells with Fulcrum* cement-conveyed frac performance technology and discovers that those wells outperform 54 previous wells that were cemented conventionally.

The operator's concerns

After drilling and completing 54 wells, the operator believed that incomplete isolation between perforations might be reducing their stimulation efficiency and thus their potential productivity.

What was tried first

The operator followed industry best practices for primary cementing in horizontal wells.

What Schlumberger recommended

Fulcrum technology improves fracturing performance by modifying the rheology of nonaqueous fluid left in channels behind the casing, limiting fluid mobility and communication between perforation clusters.

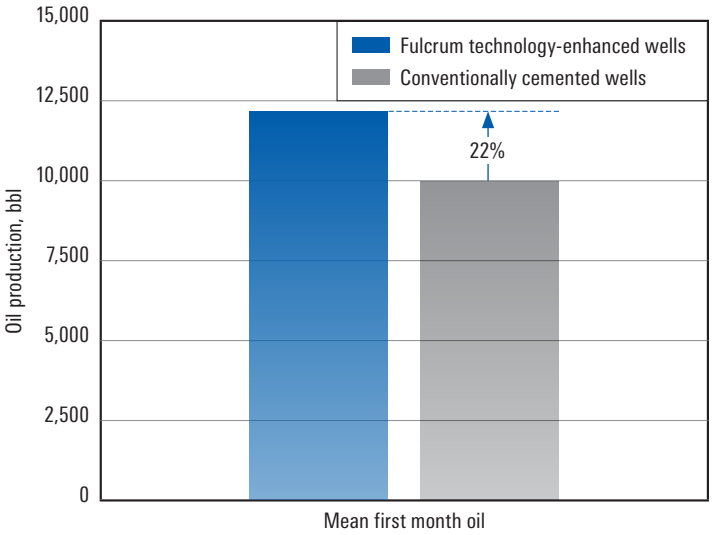
What the operator achieved

After cementing with Fulcrum technology, the operator stimulated nine new wells using a plug & perf multistage fracturing process.

Using public data, the first full month of production from the nine new wells was compared with that of 54 prior wells developed by the same operator within the last 2 years, within a 5-mile radius, and targeting the same production zone.

The mean oil production in the Fulcrum technology-enhanced wells was 22% higher as compared with mean production from the conventionally treated wells. The improvement yielded a total increment of more than 19,000 bbl of oil.

The production improvements were found to be statistically significant, with a *p*-value of 0.0003.



Improving isolation between perforation clusters helped an operator in the Denver–Julesburg Basin improve early oil production. Source: IHS.