

Colorado Operator Raises Codell Production with Cementing

Wells cemented using Fulcrum technology outperform nearby wells cemented conventionally

Three Codell Sandstone wells cemented using Fulcrum* cement-conveyed stimulation performance technology delivered higher median initial production as compared with nearby conventionally cemented wells targeting the same formation.

The operator's concerns

An independent operator wanted to maximize hydraulic fracturing efficiency in plug & perf wells targeting the tight oil Codell Sandstone formation. In particular, engineers wanted to maximize zonal isolation to minimize stage-to-stage fracturing fluid communication and nonuniform fractures.

What was tried first

Despite using industry best practices for centralization and spacers, the engineering team was concerned that channels of nonaqueous drilling fluid (NAF) might enable fracturing fluid to migrate between perforation clusters behind the casing.

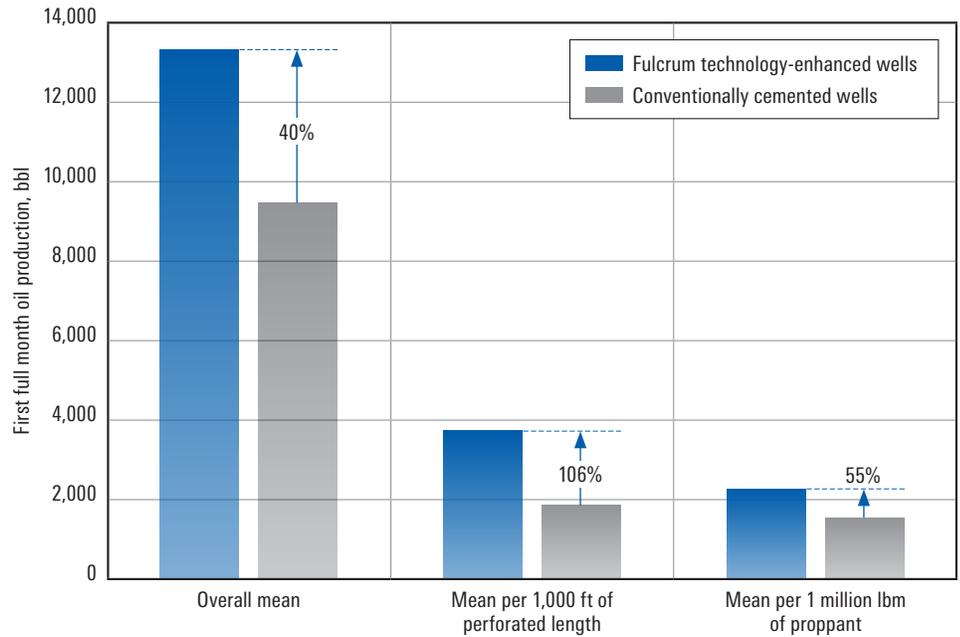
What Schlumberger recommended

Fulcrum technology improves fracturing performance by modifying the rheology of NAF left in channels behind the casing, limiting fluid mobility and interstage communication.

What the operator achieved

Using data from public sources, mean early oil production was compared for three wells cemented using Fulcrum technology and 44 wells drilled and stimulated within the last 2 years and within a 10-mile radius.

For the Fulcrum technology-enhanced wells, the median production in the first full month was 40% higher than the median of the conventionally cemented wells. Normalized by length of perforated interval, oil production in the first full month was 106% higher for the Fulcrum technology-enhanced wells. Normalized by proppant placed, the Fulcrum technology-enhanced wells outperformed the others by 55%.



Three Codell Sandstone wells cemented using Fulcrum technology produced more first-month oil as compared with nearby offsets that were cemented conventionally. Source: Public data from IHS.

*Mark of Schlumberger
Other company, product, and service names are the properties of their respective owners.
Copyright © 2019 Schlumberger. All rights reserved. 19-ST-634489