

Chevron Saves USD 690,000 per Year with Flexible Frac Fluid Delivery Technology

MonoFlex technology eliminates jumper lines, reduces rig-up time, and improves wellsite safety for abrasive 100-bbl/min frac jobs, Permian Basin

Chevron improved its HSE footprint while saving opex on fluid delivery to the wellhead by switching from conventional treating iron to the MonoFlex* dual-connection fracturing fluid delivery technology.

Chevron's goal

Improve overall operational efficiency and wellsite safety for multiwell pads stimulated using abrasive sand-laden fracturing fluids pumped at 100 bbl/min.

What Chevron tried first

Deployment of *Monoline** flanged-connection fracturing fluid delivery technology improved rig-up time and connection integrity, but it is rated only for wells fractured at rates below 85 bbl/min. Wells requiring the higher rates continued to use conventional treating iron with hammer unions that are prone to mismatch, wear, and leakage, especially at high pressures.

What Cameron recommended

MonoFlex technology is a robust and flexible high-pressure system with only two flanged connections—a significant reduction compared with the 12 to 30 required for conventional systems.

What Chevron achieved

Within 3 months of deploying the MonoFlex technology with one frac crew, Chevron added the technology to a second crew. Reduced rig-up times saved Chevron 4.5 hours per well for a total savings of USD 108,000 per year. In addition, the sealing technology improved the integrity of the fluid delivery system, which eliminated NPT related to fixing fluid leaks in hammer union connections.

Deploying MonoFlex technology also eliminated the need for jumper lines and restraint systems, which could have been at least USD 580,000 in additional cost per year.



MonoFlex technology improved rig-up time and wellsite safety, eliminating dozens of hammer union connections while still enabling 100-bbl/min delivery of abrasive, proppant-laden fracturing fluid.

“MonoFlex technology removed the hammer union connections, a known failure point in many systems. This also removed the need of costly restraint systems.”

Jay Painter, Headmaster of Wellheads
Trees, and Related PCE, Chevron Drilling Engineering

“The deployed technology enabled faster rig-up during site prep and reduced HES hand injury exposure. An unexpected surprise was the work area appearance. It was less cluttered and cleaner.”

Kevina Bland, Performance Completion Engineer
Chevron Mid-Continent Business Unit