

Eagle Ford Operator Reduces Hydraulic Fracturing Costs by Approximately USD 2.7 Million per Month

CAMShale fracturing fluid delivery and flowback service eliminates fracturing-related NPT and achieves 100% valve integrity success rate

CHALLENGE

Reduce NPT related to hydraulic fracturing equipment in the Eagle Ford Shale play.

SOLUTION

Use the CAMShale* fracturing fluid delivery and flowback service to deploy and proactively manage and service fracturing equipment.

RESULTS

Achieved a 100% valve integrity success rate and saved the operator an average of USD 2.7 million of NPT per month.



Operator needed to improve reliability of fracturing equipment

Hydraulic fracturing is the completion technique of choice for most unconventional wells, but it is tough on equipment. Erosion of flow bores, corrosion of wetted surfaces, and high and variable loads all have a negative impact. Frac tree and manifold fatigue is caused by pressure variations during fracturing cycles, vibrations due to high-pressure pump surges, unplanned pressure spikes resulting from upstream control anomalies, and erosive metal loss caused by high-volume flow of sand slurry and debris.

An operator in the Eagle Ford Shale play was experiencing 3–4 failures of hydraulic fracturing equipment per week and the resulting NPT was costing an average of about USD 2.7 million per month. In an effort to reduce downtime and improve operating efficiency, the operator signed a two-year agreement with Cameron for the CAMShale fracturing fluid delivery and flowback service.

Cameron provided a comprehensive service

The CAMShale service incorporated frac trees and manifolds, frac iron, and the FracServ* enhanced valve-reliability program. Together with streamlined operations, Cameron provided full aftermarket support 24/7, both in the field and in the shop.

The FracServ program includes inspections and procedures to identify equipment degradation and adapt maintenance programs to ensure frac valves are in “as new” condition for each job. Highly skilled technicians performed equipment installation and testing, field repair, and routine scheduled maintenance. They also completed a range of other jobs, including de Completions, recompletions, trim changes, and installation of safety equipment.

Improved performance eliminated USD 2.7 million of NPT per month

Since the beginning of the agreement, Cameron has supplied up to 16 frac stacks per week with zero spills and zero HSE incidents. In addition, the valve integrity success rate has been 100% on 189 frac stacks and 72 zipper manifolds. Pleased with this performance, the operator has selected Cameron as its sole supplier of zipper manifolds and frac trees.



Cameron conventional frac trees with 90° goat heads during toe preparation.



Cameron frac trees, frac manifold, and frac iron at the wellsite.