

MVP (Maximum Volume Placement) Frac™

Taking ordinary proppant to new places

Efforts to improve proppant transportation have traditionally focused on viscosifying the fluid system, but in today's tight reservoirs, it's more typical to use non-viscous slick water treatments. These slick water treatments can be effective, but do present some challenges, including poor proppant transportation, increased settling and duning, and less effective proppant placement. To improve proppant transportation in slick water systems, Trican began to look beyond the fluid system, turning our attention to the proppant.

Trican's proprietary MVP Frac™ is a simple-to-apply additive that modifies ordinary proppant, making it more buoyant without increasing fluid viscosity. With MVP Frac, a gasphilic coating on the proppant attracts gaseous phases in the fluid. This gives each grain of sand the ability to travel higher and deeper into the reservoir, propping more net pay. Adding a low percentage of nitrogen to the frac fluid is the most effective way of making gas available to surround the proppant for improved transportation. With less proppant settling, greater distribution, and all the benefits of a slick water system, MVP Frac economically increases your production.

Photos of Slot Flow Tests at Static Condition



Conventional slick water - settled 40/70 sand 300 kg/m³ (2.5 ppg)

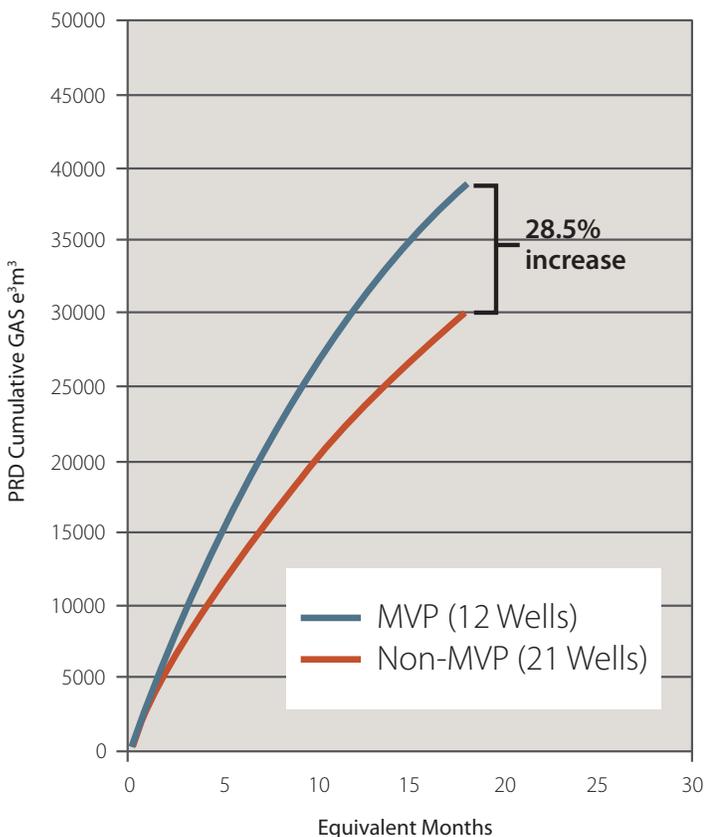


MVP Frac slick water - settled 40/70 sand 300 kg/m³ (2.5 ppg)

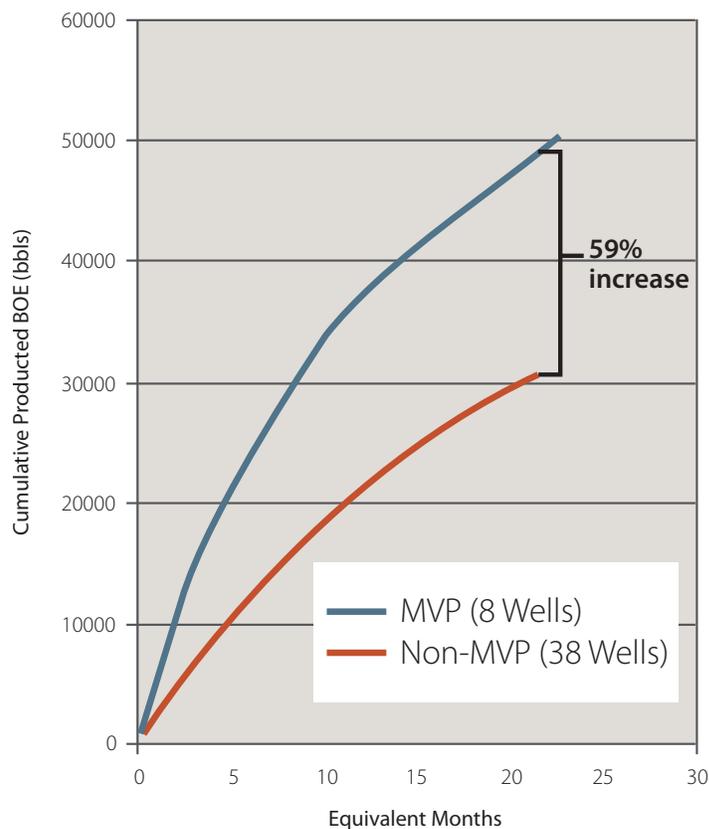
Advantages

- Superior distribution pattern for increased proppant conductivity and net pay coverage
- Maintains slick water fluid viscosity, with no additional gels or polymers
- No damage from residual polymer in the proppant pack and formation
- Enables higher sand concentrations
- Reduces water volumes
- Reduces sandoffs when using multistage fracturing sleeves — fewer coiled tubing cleanouts
- Compatible with most standard proppants, water sources and fracturing additives
- Proppant easily fluidized, eliminating the need for gelled fluid sweeps
- Simple to apply proprietary technology
- Increased regain permeability and conductivity

Gas Well Example



Oil Well Example



For more information, please call **Trican Well Service**.



Corporate Head Office
 Suite 2900, 645-7th Ave SW
 Calgary, AB, Canada T2P 4G8
P +1.403.266.0202
W TricanWellService.com

Houston Office
 5825 N. Sam Houston Parkway West
 Suite 600, Houston, TX, U.S. 77086
P +1.281.716.9152
W TricanWellService.com