FracAdvance™
HYBRID PROPPANT SUSPENSION FLUID

Leading-Edge Fluid Technology to Enhance Propped Volumes
Open Your Reservoir To
GREATER PRODUCTION

Unconventional reservoirs, with their nano- to pico-darcy permeabilities, require stimulation to create conductive flow channels. The goal is to open as much of the low-permeability reservoir as possible—and then keep it open.

Overcome Conventional Frac Fluid Trade-Offs
Conventional hydraulic fracturing processes tend to focus on either crosslinked or slickwater fluids. Each has distinct advantages and disadvantages.

- **Crosslinked** fluids are highly viscous, and can thus exert greater pressure, create wider fractures, and carry higher proppant loads than slickwater fluids.
- **Slickwater** formulations, with their low viscosity, flow easier and reach deeper into the formation to create long, thin fractures.

**FracAdvance Fluid Technology**
offers a low-viscosity fluid that delivers high proppant carrying capacity while requiring low horsepower for injection.

FracAdvance Fluid Technology
solves your proppant delivery problems.
MAXIMIZE Propped Reservoir Volume

FracAdvance fluid technology generates fractures that reach farther into your pay zone, and then props more of those fractures open, to produce from deeper within your reservoir.

Designed For Your Reservoir

FracAdvance fluid properties, such as viscosity, density, proppant type, and concentration, can be modified or even redesigned to achieve higher proppant-carrying capacity, lower proppant settling and better stability based on the specific reservoir and injection conditions.

Fluid and proppant design is analyzed in a reservoir scale model using an advanced geomechanical and production engine. Geomechanical models can evaluate hydraulic fracture propagation, natural fracture reactivation, and proppant transport within hydraulic fractures and the reactivated natural fracture network. The geomechanical model also simulates proppant mechanical deformation (both embedment and crush) and resulting fracture closure behavior during production and output conductivity reservoir volume for production analysis. These evaluations influence our fluid design, and are iteratively rerun to obtain an improved or optimized design.

Reduce Formation Damage

This chart compares conductivity through the proppant pack when using different types of fracturing fluids. The crosslinked fluid, which can carry more proppant, produced greater formation damage than the less-viscous slickwater fluid, which carries less proppant. The FracAdvance fluid regains greater permeability despite its ability to carry more proppant than the slickwater fluid.

Advance Your Fluid Performance

FracAdvance fluid technology gives you distinct advantages over conventional frac fluids:

- Longer effective fracture lengths and larger conductive reservoir volume
- Less surface horsepower per ton of proppant placed
- Enhanced fracturing efficiency and ultimate production

By contrast, the low viscosity of slickwater fluids means they do not hold proppant in suspension for as long as crosslinked fluids, so gravity carries most of the proppant to the lowest parts of the fracture network.

FracAdvance fluid technology lets you fracture deep into the formation, and keep those fractures open to maximize volume and boost production.
Open up more of your reservoir to production. To learn how FracAdvance fluid technology can create longer propped fractures for your reservoir, please visit weatherford.com

OPEN UP MORE OF YOUR RESERVOIR TO PRODUCTION.