

PrimeStar fracturing fluid system

Reduce hydraulic horsepower requirements

Applications

- Fracturing and frac-packing applications in intervals at >15,000 ft (4570 m) TVD
- Deepwater wells
- HP/HT environments

Features and Benefits

- Compatible with high-density sodium bromide-based brines
 - Reduces hydraulic horsepower requirements at surface
 - Improves compatibility with reservoir fluids and minerals
- High apparent viscosity and good shear stability
 - Reduces incidence of premature screenout
 - Improves proppant placement throughout created fracture
- Crosslink times can be delayed
 - Minimizes hydraulic horsepower requirements
- Breaks reliably with EnZyme™ and HighPerm™ breaker technologies
 - Minimizes formation damage
 - Maximizes fracture conductivity
- Easily prepared
 - Operational flexibility to use batch-mix or continuous-mix processes
- Super fluid efficiency
 - Minimizes fluid volumes and polymer loading

The Baker Hughes **PrimeStar™ fracturing fluid system** is designed for use in deepwater well stimulation applications. The PrimeStar fluid system comprises a weighted brine to allow for the use of conventional pumping equipment in execution of fracturing and frac-packing operations. The premium, borate-crosslinked guar fluid in a sodium bromide-based brine is ideal for applications where excessively high surface treating pressures would be required when using conventional water-based fluids. The increased fluid density provided by the brine yields greater hydrostatic head pressure, allowing for significant reductions in surface pumping pressure and the associated hydraulic horsepower requirements.

The PrimeStar system combines the technology of a fast-hydrating guar gelling agent with Baker Hughes' proprietary **Spectra Frac™ G delayed-crosslinking fluid** chemistry, optimized

to perform in sodium bromide-based fluids with densities ranging up to 12.5 ppg (1498 kg/m³).

Technical Data

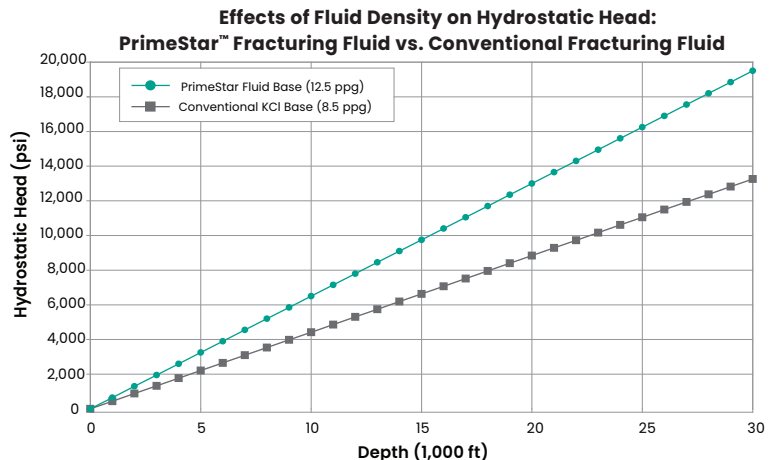
- Typical temperature range: 100 to 300°F (38 to 149°C)
- With an additional additive, the PrimeStar system may be used at temperatures up to 350°F (177°C).
- Designed for use with 9.5 to 12.5 ppg (1138 to 1498 kg/m³) sodium bromide-based fluids

Safety Precautions

Refer to the system components material safety data sheet for information and first aid.

References

- MSDS



Note: Increase in hydrostatic pressure for PrimeStar fluid resulting in lower surface treating pressure; i.e., 4,300 psi reduction in STP AT 20,000 ft MD.