CO_2 Foam Fracturing Fluids

High performance foam fracturing fluids

APPLICATIONS

- Hydraulic fracturing treatments
- Formation temperatures up to 250 °F (121 °C)

BENEFITS

- Improved production
- Low formation damage

FEATURES

- Robust fluid rheology over extended time
- Low polymer loadings
- Rapid clean up
- Environmentally friendly

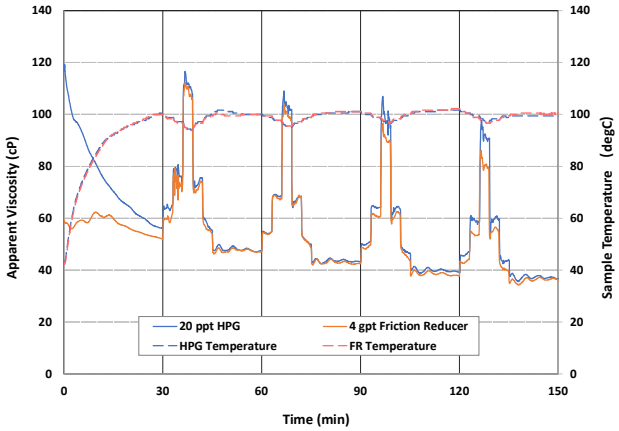
HIGH PERFORMANCE FOAM FRACTURING FLUID

CO_2 Foam Fracturing Fluid is a unique high performance fracturing fluid system which can be used for temperatures up to 121 °C. Using ***CO_2 Foam Fracturing Fluid***, you will maximize your well production and significantly improve the operational efficiency.

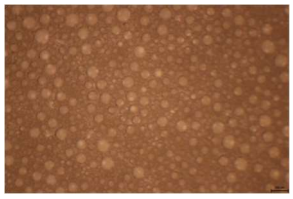
When fracturing wells with water-sensitive formations, a large amount of water is pumped down with conventional fracturing fluids. The wells tend to exhibit lower production due to clay swelling. ***CO_2 Foam Fracturing Fluid*** is specially designed to solve this problem with significantly reduced water content by maintaining viscosity in the form of foams. It is especially beneficial for areas facing water shortages. In addition, in depleted wells, using foam fluids allow for rapid flowback and cleanup.

CO_2 Foam Fracturing Fluid uses a specially designed foaming agent, which promotes highly stable foams, providing superior proppant transport without the need of a temperature stabilizer. It is compatible with polysaccharide-based gelling agents as well as synthetic friction reducers, making it ideal to be deployed in both systems. By generating stable foams, the fluid systems reduce the polymer loadings compared with conventional, non-foam fluids, thereby reducing formation damage and improving proppant pack conductivity.

The additives are compatible with current pumping equipment, with easy metering at wellsite. Combined with the excellent fluid performance, ***CO_2 Foam Fracturing Fluid*** offers a solution improving the operational efficiency, reducing the cost, and maximizing the well production.



CO_2 Foam Fracturing Fluids *rheological performance by Chandler8500 Foam Rheometer, showing stable viscosity at 100 ℃ for 2 hrs. Loading of gelling agent HPG is 20 ppt, or friction reducer 4 gpt.*



CO_2 Foam Fracturing Fluids *foam texture under pressure and temperature*

FLUID ADDITIVES

- Gelling agent
- Foaming agent
- Clay stabilizer
- Gel breaker