

Diamond PAQ fluid system

Optimizes proppant transport while minimizing formation damage

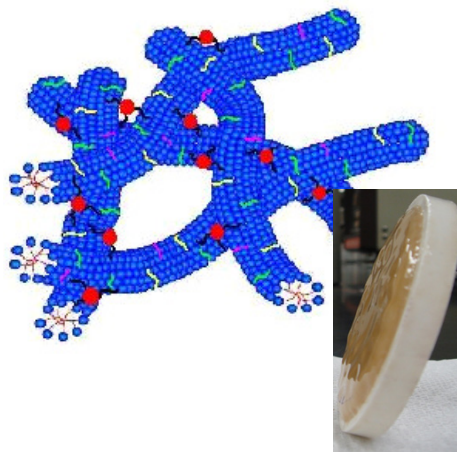
The Baker Hughes **Diamond PAQ™ fluid system** is a water-based, non-ionic “polymer-free” viscoelastic surfactant (VES) fluid designed for gravel packing oil and gas reservoirs where minimizing formation damage and maximizing proppant and gravel pack permeability are of primary importance. Diamond PAQ fluid contains an internal breaker system that allows application in oil, dry gas, and gas condensate wells. The fluid can be weighted with readily available water-soluble salts to create a greater hydrostatic head that, in turn, decreases surface treating pressure on wells that are to be treated at or near the pressure limitations of the stimulation pumping equipment.

Diamond PAQ fluid can be used at a maximum density of 14.2 ppg when mixed with calcium-based brine. Typical high-density fluid is mixed in the 11 to 13 ppg range with a blend of calcium chloride and calcium bromide. These blends have greater density and save almost 50% of the expense of mixing with sodium bromide brine.

Diamond PAQ fluid can be mixed in the following base brines:

- Filtered seawater
- 3 to 23% KCl (9.6 lb/gal)
- 7 to 38% CaCl₂ (11.6 lb/gal)
- 8 to 44% NaBr (12.5 lb/gal)
- 10 to 55% CaBr₂ (14.2 lb/gal)
- CaCl₂/CaBr₂ blends

To learn more about the Diamond PAQ fluid system, contact your local Baker Hughes representative.



Pseudo filter cake formed by fluid loss control additives associated with VES micelles.

Applications

- Openhole gravel packing through multi-path screens

Benefits

- Reduces surface hydraulic horsepower requirements
- Reduces likelihood of incompatibilities with formation fluids
- Ensures 90 to 100% proppant pack conductivity
- Ideal for use in wide ranges of reservoir conditions