

D500 LT GASBLOK

Gas migration control additive for low temperatures

APPLICATIONS

- Control of gas migration during low-temperature primary and remedial cementing

BENEFITS

- Reduced HSE risk during cement placement

FEATURES

- Compatibility with CemCRETE* concrete-based oilwell cementing technology and standard Schlumberger cement additives
- Better gas migration and fluid loss control because rheology can be controlled during hydration
- Low-temperature component of the Schlumberger Gas Migration Control engineering package

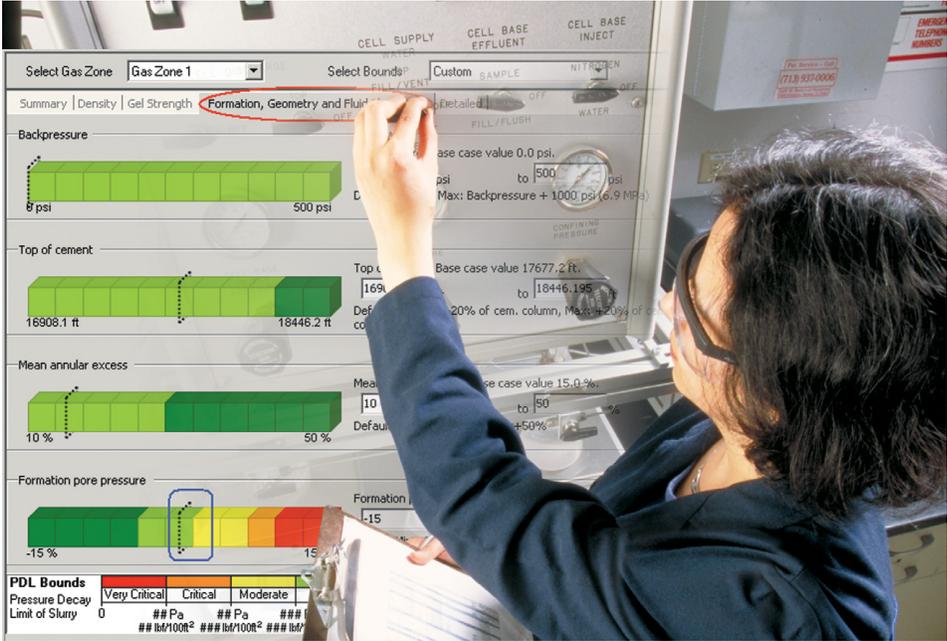
D500 LT GASBLOK* gas migration control additive creates an impermeable barrier that prevents annular gas migration into the cement slurry during the critical hydration period. The additive is a suspension of polymeric microgels. Gas migration control results primarily from the ability of these microgels to form an impermeable cement filtercake.

When migration is imminent, gas invades the portion of the cemented annulus across the gas zone, displacing water and polymer particles dispersed throughout the setting slurry. This action causes the particles to coalesce within the pore spaces at the pore throats, forming a barrier that blocks further progress of the gas through the setting cement and up the annulus.

The ability of the cement slurry to stop gas migration is directly related to additive concentration, which depends on the bottomhole circulating temperature (BHCT) and slurry solid volume fraction.

Applications can be designed using fresh water or seawater. Typical additive concentrations range from 0.5 to 1.5 galUS per sack [44 to 132 L/t] of cement. Concentration is a function of temperature and dispersion and to a lesser extent, slurry density and porosity.

D500 LT GASBLOK additive can be used at BHCTs from 32 to 160 degF [0 to 71 degC] and in slurries of any density. Typical slurry densities range from 8.0 to 20.0 lbm/galUS [960 to 2,400 kg/m³].



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