LiteSet

Lightweight cement system

Applications

- Highly permeable or fractured formations
- All operations involving the SealBond cement spacer system when severe lost returns are a problem

Features and benefits

- Provides superior quality lightweight cements with higher compressive strengths than conventional extended slurries
- Fit-for-purpose designs for specific applications
- Foam, pozzolan, or glass borosilicate spheres are used to lower the density of the slurry
- Real-time well conditions determine the final slurry composition
- Can be designed with virtually all API, ASTM, pozzolan, and lightweight cements
- Compatible with most Baker Hughes cement additives

Application

The **LiteSet™ lightweight cement system** from Baker Hughes takes a new, less-is-more approach to designing lightweight cement systems. One option is to use nitrogen or air to foam a base slurry to a lightweight density to produce a high-strength cement system. Additional additives can be added to the foamed slurry to satisfy properties that the well dictates. A second option uses lightweight, high-strength spheres to create a low-density, high-strength LiteSet cement system. Using this option involves formulating high-performance lightweight slurries to optimize the volumetric proportion of liquids-to-solids in the system. Once the optimum balance of cement, spheres, and water are in the base design for desired density, other additives can be used to develop slurry properties to satisfy the well parameters.

Baker Hughes prides itself on solving potential problems at the wellhead, understanding that a single slurry does not fit all applications. This approach allows unlimited design flexibility and takes lightweight cement systems out of the lab and into the real world. Our cementing philosophy utilizes state-of-the-art cement pumping equipment, such as the Baker Hughes **Seahawk™** and Baker Hughes **Falcon™ cement units**, to help ensure a quality cement job.

LiteSet cement slurries are part of the Baker Hughes Set for Life™ family of cement systems which are designed to isolate and protect the targeted zone for the life of the well. These slurries can be blended with other systems in this family to help ensure long-term zonal isolation.

Materials compatibility

Compatibility testing is recommended prior to the job.

Safety and handling

Before handling, storage, or use, review the Safety Data Sheet (SDS) for guidance.

Typical properties

Typical temperature range	32 to 450°F (0 to 232°C) BHCT
Typical slurry density range	8 to 13 ppg (959 to 1558 kg/m^3)