

CEMPRIME SCRUB

Engineered scrubbing spacer

APPLICATIONS

- All cementing applications
- Cement plug operations for decommissioning in openhole or cased environments
- Bottomhole circulating temperatures from 20 to 140 degC [68 to 284 degF]
- Freshwater and seawater mixing

BENEFITS

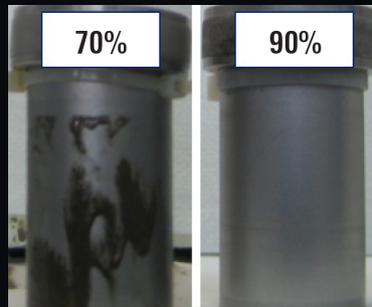
- Improves nonaqueous fluid removal with scrubbing fibers
- Enhances cement-to-casing bond with better hole cleaning for both water-based and nonaqueous drilling fluids
- Reduces remedial cementing requirements
- Aids in transport of unwanted material left in place during cleanup run prior to plug and abandonment activities

FEATURES

- Fibers to enhance mud removal
- Ability to be mixed in batches or during the job
- Compatibility with nonaqueous cement and drilling fluids
- Robustness to water quality

CemPRIME Scrub* engineered scrubbing spacer contains fibers that improve water-based or nonaqueous drilling fluid removal during cementing operations. Compared with conventional spacer systems, it enhances cleaning mainly because of the added scrubbing capability of the fibers.

An enhanced version of the standard CemPRIME* engineered chemistry spacer, the CemPRIME Scrub spacer is engineered with surfactants and solvents that clean and demulsify in a wide range of temperatures, base oils, and salinity. It is compatible with cement slurries and nonaqueous fluids and does not modify cement slurry thickening times or compressive strength development.



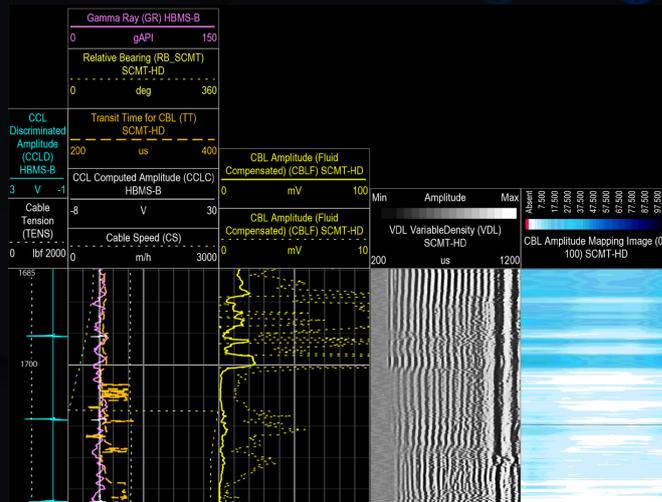
CemPRIME Scrub spacer (right) removes nonaqueous fluid more efficiently compared with a conventional cementing spacer (left).

ENGINEERED TO SUIT SPECIFIC WELL CONDITIONS

Like the standard CemPRIME spacer, the scrubbing spacer is engineered based on expected downhole temperature, mud system base oil, and salt concentration requirement. Performance is simulated in the laboratory to verify emulsion inversion, spacer stability under expected conditions, cleaning ability, and compatibility with the cement slurry design. CemPRIME Scrub spacer can be used when bottomhole circulating temperatures are in the range of 20 to 140 degC [68 to 284 degF].

It can be mixed using freshwater, seawater, or salted water and mixed in batches or during the job. The typical concentration of fibers is approximately 2.33 lbm/bbl of spacer.

CemPRIME Scrub spacer also enhances the removal of drilling fluids and other wellbore deposits in all cement plug placement scenarios and during well decommissioning.



In a Thailand field known to have annular pressure problems, wells cemented after conditioning with CemPRIME Scrub spacer experienced no such problems (from SPE-180624).