Halad®-413
Fluid Loss Additive

Halad®-413 fluid-loss additive can provide excellent fluid-loss control in high-temperature wells, especially when used on densified cement slurries or slurries mixed with high salt concentrations. Cement slurries that have traditionally exhibited surface mixing difficulty have responded especially well to Halad-413 additive because it does not viscosify the slurry.

Features
Halad-413 additive has a broad application range. For a variety of cement compositions, fluid-loss values can be obtained over a wide temperature range, from 180° to 400°F. Even above 400°F, Halad-413 additive does not tend to increase viscosity. Other features include the following:

• In many cases, cement slurries mixed with Halad-413 additive do not require the addition of dispersants; they can be mixed with strength-stabilizing agents without an increase in the slurry viscosity.
• Halad-413 additive can enhance densified cement designs because it allows heavyweight slurries to be mixed at lower surface viscosities.

Benefits
Halad-413 additive helps provide the following benefits associated with low fluid loss in squeeze-cementing and primary cementing jobs.

Squeeze Cementing. In squeeze-cementing jobs, Halad-413 additive can offer the following advantages:

• It helps reduce premature dehydration in tubing and casing while perforations are squeezed.
• Long perforated intervals can often be successfully squeezed in a single stage.
• Satisfactory squeeze results can be obtained at low pressures without overdisplacement.

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Cementing
• The additive helps protect water-sensitive shale sections that may weaken and break down because of cement filtrate.

• Halad®-413 additive helps reduce the amount of filtrate that can penetrate formations containing bentonite clays.

Primary Cementing. Halad-413 additive helps provide the following benefits during primary cementing jobs:

• It can lessen the possibilities of water and/ or emulsion blocks, and blocks caused by bentonitic clay swelling resulting from cement filtrate.

• Halad-413 additive helps protect water-sensitive shales, and reduces premature bridging in annuli, which may be caused by dehydration.

• It helps reduce loss of water from slurry, thus maintaining lower viscosities and circulating pressures.

• Halad-413 additive helps control gas leakage while cement is setting.

For more information on the benefits Halad®-413 Fluid Loss Additive can bring to your cementing operations, contact your local Halliburton representative.