Flo-Chek® Service

Lost Circulation Service

Flo-Chek® Service consists of a two-fluid system used for sealing lost-circulation zones and squeezing off subsurface water. This process is a highly effective squeezing method that can control underground water flows and seal lost-circulation intervals. It can be used for both freshwater and brine flows.

Applications

The lead slurry in the Flo-Chek Service consists of Flo-Chek chemical A. This chemical reacts with calcium and other divalent ions (induced or in-situ) to form a stiff gel that helps seal and bridge in the formation. When cement contacts this chemical, it develops rapid gel strength.

Features

Adding certain lost-circulation additives, such as gilsonite or Tuf Plug material, to the Flo-Chek Service can help improve its effectiveness at preventing lost returns.

Using Flo-Chek Service

Pumping Guidelines

The following prejob procedures are recommended for Flo-Chek Service treatments:

• For scaling off formation brine, pump one tubing/drillpipe volume of freshwater.

• For treating lost circulation in a brine-water zone, pump 5 to 10 bbl of fresh water.

• For treating lost circulation in a freshwater or low-concentration salt zone, pump 50 bbl of 10% brine containing at least 3% calcium chloride (CaCl₂) followed by a 5-bbl freshwater spacer.

General Procedures

The following post-job procedures are recommended after the initial fluid has been pumped:

1. For each foot of depth, pump 200 gal of Flo-Chek chemical A with 10 lb/gal silica sand (SSA-2™ coarse silica flour) or 20/40-mesh sand and ¼ to ½ oz/gal of Tuf Additive No. 2™ material.

2. Pump a 5-bbl freshwater spacer.

3. Mix and pump cement containing a CaCl₂ accelerator, Tuf Additive No. 2 material, and sand (or some other medium-density material for controlling lost circulation).

4. Finish with the appropriate displacement and squeeze technique.
For more information on the benefits Flo-Chek® Service can bring to your cementing operations, contact your local Halliburton representative.