

PETROSTEP® SC-1

SPACER CLEANING BLEND

Wells drilled with oil-based/invert-emulsion drilling fluids need to be cleaned before cementing. Cleaning these types of drilling fluids and creating a water-wet surface on the well bore typically requires multiple solvent and solution pills. This process is not only costly but also hazardous to the environment.

Aiming to provide a more efficient solution for well bore cleaning, Stepan Oilfield Solutions has developed PETROSTEP SC-1, a surfactant blend that cleans drilling fluid residue and leaves the well bore surface in a water-wet state. As the following figures show, even in low concentrations, PETROSTEP SC-1 shows excellent cleaning performance in a range of total dissolved solids, from fresh water to heavy brine.

When it comes to cleaning and preparing the well bore, PETROSTEP SC-1 may help address the needs of producers looking to create efficiencies and cost savings.

FIGURE 1

Invert Drilling Fluid 1

Cleaning Procedure: Fann 35 at 600 rpm for 3 minutes

*Brine:
20% Sodium Chloride
(NaCl)*



Brine Only



20 wt% Xylene



3 wt% PETROSTEP SC-1

*Brine:
15% Calcium Chloride
(CaCl₂)*



FIGURE 2

Invert Drilling Fluid 2

Cleaning Procedure: Fann 35 at 600 rpm for 3 minutes

Brine: 20% NaCl



Brine Only



20 wt% Xylene



3 wt% PETROSTEP SC-1

Brine: 15% CaCl₂



TYPICAL PROPERTIES

- Appearance at 25°C: Clear liquid
- Density at 25°C, g/mL: 1.02
- Moisture, %: 30
- pH (1% in DI H₂O): 6 - 8
- Viscosity at 25°C, cps: 115
- Flash Point (SETA), °C: >94
- Pour Point, °C: 0
- DOT Classification: Not Regulated as a Dangerous Good

To learn more about PETROSTEP SC-1 and other PETROSTEP products, email oilfield@stepan.com or call 713.955.8100. For commercial ordering information, email order.placement@stepan.com.

BRINGING VALUE TO THE SURFACE™



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