

BaraKlean® Solutions

WELL CLEANUP AND DISPLACEMENT SERVICE

CHALLENGE

Residual oil and solids left behind by drilling operations can accumulate in drilling equipment, hindering completion operations and can also damage the producing formation. In the transition from drilling to completion operations, the wellbore is cleaned out and the drilling fluid is displaced with clean brine.

A badly designed or poorly executed displacement can consume additional fluids, logistics and rig resources. When planning cleanup and displacement operations, the designer should anticipate issues such as cleaning efficiency, address equipment limitations and mitigate potential problems such as surface volumes. In addition, during the execution of the displacement, pump rates and annular velocities should be managed; rotation and movement of the string should be controlled; and the use of pits, tanks and storage should be optimized.

OVERVIEW

BaraKlean® Solutions include a wide range of casing cleaners, viscosifiers and solids-free fluids designed for displacement programs. BaraKlean Solutions address the entire operation; products are tested and concentrations and loadings are optimized in standardized laboratory testing.

Displacement operations are modeled using the Completion Fluid Graphics (CFG™) hydraulics simulation package. Using CFG pill volumes, pump rates, contact times, standpipe pressures and flow regimes are optimized for high performance. With custom-designed displacement trains, we combine chemistry and engineering technologies to clean the wellbore efficiently, effectively and safely.

Cleaners	
BARASCRUB™	Solvent-based Cleaner
PIPESCRUB™	Pure Solvent Cleaner
*BaraKlean® -647	Combination Cleaner
*BaraKlean® -648	High Efficiency Combination
CFS™-901	Blended Mixture
*CFS™-926	Surfactant/Solvent Blend
BaraKlean® -934	Deep Water Blend
CFS™-942	Surfactant/Solvent Mixture

**Approved for North Sea use.*

FEATURES

- » Customized operations for each well
 - » Completion Fluids Graphics (CFG™) software is used to model and simulate the displacement to help optimize pill volumes, pump rates, contact times, standpipe pressures and flow regimes.
- » High performance cleaning capabilities
 - » Wide range of well cleaner, viscosifiers, and solids-free fluids that address the entire operation. Systems are tested and concentrations and loadings are optimized in standard laboratory testing.
- » Treatments for residual solids, oil and grease
 - » Wide range of cleaners, flocculants, and oil absorbents to support displacement, cleanup and filtration operations.

BENEFITS

BaraKlean Solutions service will clean your well, preparing it for completion. This service can help ensure high standards of wellbore cleanliness while using minimal rig time and producing the minimum volume of waste fluid.

Decreased rig time

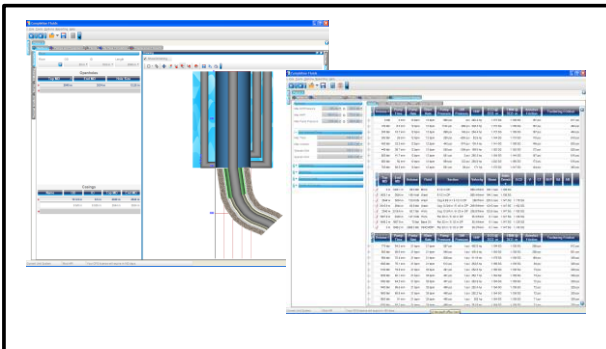
- Our well cleaners remove drilling fluid, oil, and solid residues quickly and effectively, which reduces cleanup time and filtration costs. Effective cleanup is imperative to ensure that operations are not extended when transitioning from drilling to completion operations.
- Reduce rig time by combining displacement runs with drilling or in-flow tests

Safe and effective solutions

- Establish clean, water-wet conditions
- Maximize the reliability of completion equipment
- Minimize residual oil and solids contamination

Maximize production potential

- Minimize the opportunities for solids invasion formation damage



CFG hydraulic simulation.

Our goal is to create a smooth transition from drilling to completion operations by providing displacement programs designed on sound principles, chemical cleaners, and tools with proven performance and operations which are executed quickly and efficiently.

Creating a customized solution on every displacement, Halliburton experts help ensure that the right products, technologies and processes are in place to do the job efficiently, effectively and safely, every time.

halliburton.com

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