CoilSweep® Service
Combines Halliburton’s Coiled Tubing Expertise and Fluid Technology for Optimum Cleaning Efficiency

CoilSweep® service has been developed to address the problems associated with cleaning sand and debris from large diameter, deviated, or horizontal wellbores. This service provides several important benefits:

- More efficient cleanouts.
- Higher returned permeability.
- More economical than previous approaches.
- Capable of gelling any clear fluid for optimum rheology.
- Requires less time on location.

Results of Full Scale Testing
Using coiled tubing with standard industry practices can yield poor results. Based on extensive full scale testing, Halliburton’s investigation revealed three areas where problems can occur:

1. Using the wrong fluids.
2. Neglecting the different mechanics associated with deviated or horizontal wellbore clean-outs as opposed to vertical wells.
3. Under estimating the impact of low annular velocities in large diameter wellbores.

A significant lesson learned: Blind use of HEC polymer sweeps and old rules of thumb can result in high failure rates and inefficient cleanouts.

CoilSweep® Service--A Three-Part Engineered Customized Approach

1. Service tool. The CoilSweep service tool can help provide optimum hole cleaning. With a design based on understanding the different mechanics associated with deviated and horizontal wells, the wash nozzle can provide optimum cleaning efficiency for wiper trips.

2. Fluid systems. CoilSweep service fluids address critical factors including carrying ability, friction pressures and minimizing formation damage—especially important when using pre-hydrated polymers.

3. Cleanout treatment design software. InSite® for Well Intervention software helps engineer the job design. It models pump pressures, flow rates, velocity profiles, predicted bed growth, and equivalent circulation densities, for both foamed and conventional fluids.
CoilSweep® Service Fluid Systems

CoilSweep service provides four different fluid systems so that a treatment can be tailored precisely to well conditions whether the priority is hole cleaning, return permeability, or both. These fluid systems are capable of gelling any clear fluid for optimum rheology.

**CoilSweep™ I fluid** - Priority: hole cleaning. Fluid density up to 11.0 lb/gal.

**CoilSweep III fluid** - Priority: return permeability. Viscosified bromide fluids up to 20 ppg.

**CoilSweep IV fluid** - Priority: return permeability. Best for extremely sensitive formations or for mild gelling applications.

**CoilSweep Lite fluid** - Priority: both hole cleaning and return permeability. A foamed system for low bottomhole pressures or where sufficient velocities cannot be obtained.

**AquaLinear® fluid** - Based on a viscosified fluid system used for gelling a wide range of water-based brines, completion and treating fluids, the rheological properties of AquaLinear fluid differ from those of hydroxyethyl-cellulose or similar linear gels. It is based on a biopolymer gelling agent. Brines gelled with this agent are shear thinning and are uniquely efficient in static sand suspension, making AquaLinear fluid an excellent choice for wellbore cleanouts.

Cleanout Design Software

InSite for Well Intervention software includes design applications for CoilSweep service. This state-of-the-art software leverages the combined fluid technology of both Halliburton’s drilling and stimulation plus coiled tubing expertise. Cleanout designs can now provide the optimum fluid type and operating conditions to minimize the number and spacing of wiper trips to effectively clean deviated well bores. This can result in minimizing the amount of time on location.

For more information, contact your local Halliburton representative or email us at production-solutions@halliburton.com.