Carbonate Completion™ Acid (CCA™) System
Solution for Additive-Compatibility Problems with Anionic Surfactants

Acidizing reservoirs containing asphaltic crude oils can be troublesome as they may require antisludging agents, most of which can cause incompatibilities with corrosion inhibitors. Halliburton's CCA system was developed to be compatible with anionic surfactants that would cause separation with conventional acid systems. By helping to minimize separation problems, CCA system results in a more uniform treatment.

Advantages
• Can help prevent sludging in asphaltic crude oils exposed to HCl acid
• Acid system with only anionic and nonionic chemicals help prevent adsorption of additives onto sandstone formations
• Acid-blend formulation can be adjusted for use in either sweet– or sour-well environments

Case History
In Reforma, Mexico, PEMEX had experienced damage to Well Samaria 1199, drilled in a heterogeneous limestone formation. The well should have been producing more than 1,000 BOPD, but it was no longer flowing. After analyzing the well history and an oil sample, Halliburton recommended Carbonate Completion acid system, with the non-acid N-Ver-Sperse O™ dispersant system and a high-quality foam acid system as a diverter. CCA system was created for use on oils with a high tendency to form sludges, while N-Ver-Sperse O dispersant helps remove the damage created by oil-based muds. Within just 24 hours, the well was flowing through a 3/8 in. choke with 300 psi WHP. Production was up to 1,267 BOPD, and the prognosis was excellent.

For more information about how CCA™ system can help your acidizing treatments, contact your local Halliburton representative or email stimulation@halliburton.com.