

## Carbonate Acid Fluid Systems

Wells completed in carbonate formations usually require an acidizing treatment for optimal performance. The heterogeneous nature of carbonate reservoirs poses obstacles that must be overcome; however acidizing treatments are able to produce skins of  $-2$  or less, making acidizing the superior completion method in carbonate formations.

### Carbonate Stimulation Acid (CSA)

Halliburton's Carbonate Stimulation acid (CSA) is specifically designed to maximize the effectiveness of fracture acidizing or matrix acidizing in carbonate formations. CSA uses HCl acid and Halliburton additives which can handle bottom hole temperatures as high as 425°F.

### Fines Recovery Acid (FRA)

The Fines Recovery acid (FRA) is an energized acid system designed to be used in wells that normally produce fines during acidizing or wells with fluid or fines recovery problems. FRA can also be used to divert in long horizontal openhole sections. Wells treated with FRA can take advantage of the system's energy by flowing the well back immediately after treatment.

**For more information about how to best acidize your carbonate formation,  
contact your local Halliburton representative or email [stimulation@halliburton.com](mailto:stimulation@halliburton.com).**

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