

# CleanSure™ Chlorine Dioxide Service

Eradicates sulfate-reducing bacteria quickly, economically, and with minimal residuals

## Applications

- Any well with motive water
- On-the-fly well stimulation
- Water treatment
- Storage treatment

## Features and Benefits

- Reduces operational time and costs by eliminating induced bacterial action quickly
- Mitigates the risks of sour gas, corrosion, and formation damage by oxidizing iron, manganese, phenols, sulfide, and solid-soluble particles
- Uses fewer chemicals to achieve the same result as traditional bactericides, which reduces both the cost and the pH impact of stimulation operations
- Reduces the amount of residuals and minimizes the environmental impact of stimulation operations by using smaller amounts of chemicals.
- Increases formation permeability and wettability for the remaining life of the well
- Reduces the risks of corrosion, souring, and other conditions that threaten production

## Tool Description

The Weatherford CleanSure chlorine dioxide service kills active and dormant bacteria upon contact using less than 1.0 ppm of residual chlorine dioxide. Recognized as a safe and effective water treatment additive by the U.S. Environmental Protection Agency, chlorine dioxide is more powerful than conventional biocides and is effective in lower amounts and concentrations.

Unlike traditional bactericides, which require greater residence time for full efficacy, chlorine dioxide works instantly while also reducing the amount of residuals and pH impact to the stimulation operation. In addition to quickly destroying aerobic and anaerobic bacteria, the chlorine dioxide service oxidizes damaging contaminants including sulfides, manganese, phenols, and iron. Eliminating these materials increases formation permeability and wettability for the remaining life of the well.

