

# LC-LUBE ULTRA FINE

## Prevent lost circulation in water-based and invert emulsion drilling fluid systems

### Applications

- Water-, synthetic-, or oil-based drilling fluids

### Features and Benefits

- Excellent bridging properties
  - Strengthens fractures for loss mitigation
  - Ideal particle size to plug microfractures
- Solid mechanical lubricant
  - Reduced torque and drag when sliding and running pipe
- Thermally stable at <math>500^{\circ}\text{F}</math> (<math>260^{\circ}\text{C}</math>)
  - Works effectively in a wide range of temperatures

The LC-LUBE™ ULTRA FINE synthetic graphite particulate from Baker Hughes is sized to prevent lost circulation in water-based and invert emulsion drilling fluid systems. The particulate also acts as a mechanical lubricant for reducing torque and drag when drilling deviated wells and running pipe or casing.

Because of its small particle size, the LC-LUBE ULTRA FINE particulate can be run in the active circulating system without bypassing the shale shakers.

Because of its inert nature, it is fully compatible with water-, synthetic-, and oil-based drilling fluids. There are no adverse effects on chemical properties and the particulate causes no increase in the fluid rheology, even when adding up to 30 lbm/bbl throughout the drilling fluid system.

### Recommended treatment

The LC-LUBE ULTRA FINE particulate is designed to lower friction, reducing torque in most drilling fluids. The normal treatment range is 5 to 10 lbm/bbl (<math>19</math> to <math>38</math> kg/m<sup>3</sup>) of LC-LUBE ULTRA FINE additive.

This particulate is also designed to prevent or cure seepage and partial losses of all types of drilling fluid. For seepage losses, treat the system with 6 to 20 lbm/bbl (<math>22.8</math> to <math>76</math> kg/m<sup>3</sup>) of LC-LUBE ULTRA FINE additive.

The fluid system can be pretreated prior to drilling a known loss zone. For total losses, treat the system at concentrations up to 40 lbm/bbl (<math>152</math> kg/m<sup>3</sup>) in the form of a pill and then spot across the loss zone.

### Safety and handling

Before handling, storage, or use, review the Safety Data Sheet (SDS) for guidance.

### Packaging

The LC-LUBE ULTRA FINE particulate is packaged in 50-lb (22.7-kg) bags.

### Typical properties

Appearance	Gray to black powder
Specific gravity	2.26
Hygroscopic	No