

## INFORMATION

# **BORE-TROL**

SULFONATED ASPHALTIC SHALE CONTROL/BORE-HOLE STABILIZER

### **DESCRIPTION**

BORE-TROL is a water soluble sulfonated asphaltic compound, designed to be the premium shale inhibition product on the market. The product is a brown to black powder, and provides a variety of functions in high temperature mud applications.

#### **APPLICATION**

BORE-TROL is added to water base drilling fluids to help control troublesome shales, reduce HP-HT water loss, reduce torque and drag, and improve overall mud condition and performance. The dispersed resinous phase of BORE-TROL coats the surface of the borehole with a layer of particulates which deform with heat and pressure, forming a continuous, tough, thin film. The particles also bridge the openings of microfractures, deforming to seal off these fractures to prevent invasion of mud or filtrate.

BORE-TROL also contributes inhibitive compounds to the drilling fluid, while acting to satisfy positively-charged (cationic) sites on exposed shale edges. Thus BORE-TROL functions in four ways to promote borehole stability: coating the wellbore, sealing microfractures, satisfying ionic charges on reactive shales, and chemically inhibiting swelling clays.

#### RECOMMENDED TREATMENT

Normally 2 to 6 ppb (5.7 to 17.1 kg/m³). Best results are achieved by treating the system with BORE-TROL before penetrating an interval of swelling or sloughing shale. Treating after a problem has already developed may require higher dosages.

BORE-TROL should be added daily after the initial concentration has been established in the system, as the product will "plate out" on the wellbore as the hole is deepened.

#### **PACKAGING**

BORE-TROL is packaged in 50 lb or 25 kg multi-layer export bags.

BORE-TROL is a Messina trademark