CLAY CUTTER™
CLAY INHIBITOR

DESCRIPTION
CLAY CUTTER is a concentrated, non-hazardous, proprietary clay inhibitor that can be used with either polymer or bentonite drilling fluid systems. CLAY CUTTER is an ideal additive for HDD bores in reactive clay soils.

RECOMMENDED USE
CLAY CUTTER is to be used on any size HDD bore. Using CLAY CUTTER will greatly reduce or eliminate clay cuttings from sticking to each other and to the drilling tools. Swelling of the bore will be reduced or eliminated. Rotation and pullback pressures will be significantly reduced.

CHARACTERISTICS
- Greatly reduces clay rings and bit balling
- Increases returns back to the surface
- Non-hazardous
- Readily dispersible
- Reduces pullback pressures
- Reduces torque
- Will not significantly alter yield point or filtrate

MIXING AND APPLICATIONS
Add CLAY CUTTER to the drilling fluid system last. For sticky and swelling clays use 0.5 to 1 gallon per 1,000 gallons (2 to 4 liters/4 m³) depending on water sensitivity of the formation.

For maximum effectiveness, CLAY CUTTER should be used starting with the pilot hole and all reaming and pullback stages. Clays begin swelling and absorbing water immediately upon contact with water starting with the pilot hole. CLAY CUTTER will eliminate or greatly reduce this problem.

TYPICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>Clear to amber liquid</td>
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<tr>
<td>Specific Gravity</td>
<td>1.01</td>
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<tr>
<td>Solubility</td>
<td>Soluble in brine &amp; freshwater</td>
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PACKAGING
42 lb (18.9 kg) pail, 32 per pallet and 465 lb (209 kg) drum, 4 per pallet. All pallets are plastic-wrapped.