**Product Description**

NXS-LUBE® lubricant is a synthetic surfactant suitable for use in all water based fluids at high pressures and temperatures up to 450°F (232°C). NXS-LUBE lubricant is effective in low concentrations, can provide extreme pressure (metal-to-metal) and borehole (metal-to-formation) lubricity without having a negative affect on the drilling fluid properties and is moderately tolerant of divalent ions. NXS-LUBE lubricant is also effective in silicate-based drilling fluids, but is generally not effective in saturated salt systems and brines unless run at greater than 5% by volume.

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**Applications / Functions**

- Reduces the friction between the drill string and casing or wall cake
- Can be used in extreme and low pressure situations
- Forms a lasting, lubricious film on contact surfaces

**Advantages**

- Can be rapidly incorporated into the active mud system
- Immediately minimizes friction on contact
- Does not grease out in aqueous environments with high alkalinity or high divalent ion concentrations
- Helps prevent excessive wear on casing/collars
- Reduces torque and drag in high-angle and S-shaped wells
- Effective in all water-based drilling fluids and stable to 450°F (232°C)

**Typical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Amber liquid</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>0.99</td>
</tr>
<tr>
<td>Boiling point</td>
<td>500°F (260 °C)</td>
</tr>
</tbody>
</table>

**Recommended Treatment**

For normal treatment, add 1-3% by volume to the system to reduce friction.

To free stuck pipe, add 3-6% by volume in a slug or sweep treatment.

**Packaging**

NXS-LUBE lubricant is packaged in tote tanks, 55-gal (208-L) drums, and 5-gal pails.