

LOTORQ

LOTORQ* lubricant reduces torque, drag and the potential for differential sticking by reducing the coefficient of friction in FLoPRO* NT and FLoPRO SF water-base reservoir drill-in fluids.

Typical friction coefficient reductions of 35-45% have been observed in field applications after the addition of 2% v/v of LOTORQ lubricant. The lubricant also shows low-foaming, greasing and/or emulsion-forming potential.

Typical Physical Properties

Physical appearance	Amber
Specific gravity	0.9-0.95 (20° C/68° F)
Flash point	>100° C (>212° F)
Freezing/melting/pour point	ND

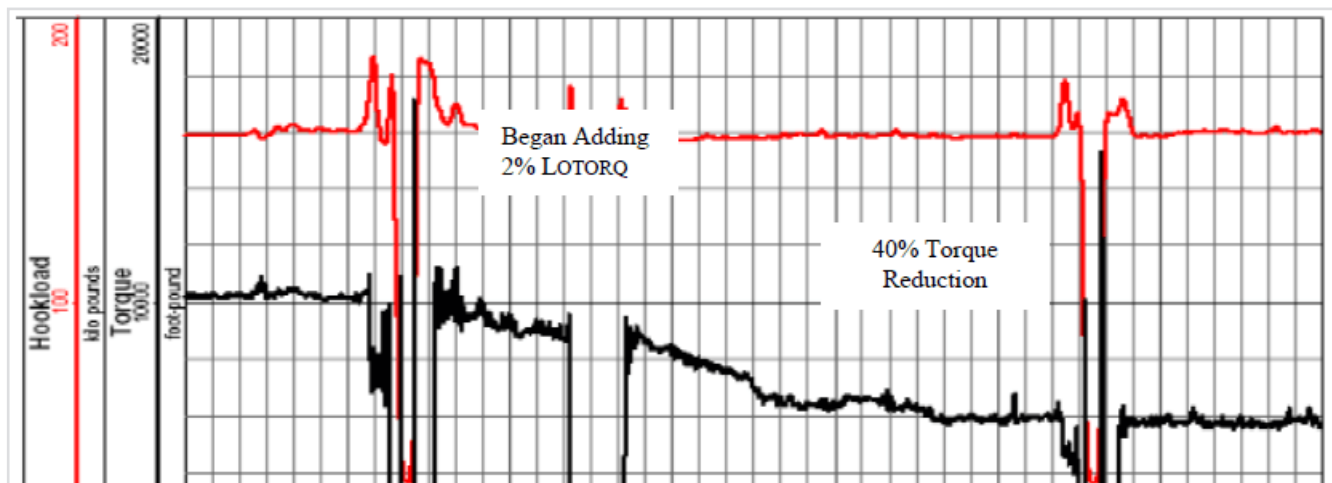
Applications

LOTORQ lubricant is designed for situations where torque, drag and/or the potential for differential sticking are likely, such as when drilling highly deviated or high-differential-pressure wells. LOTORQ additive is an effective lubricant in water-base drilling and reservoir drill-in fluids, primarily in FLoPRO NT and FLoPRO SF systems. In field applications, friction coefficient reductions of 35-45% have been observed in FLoPRO SF applications.

Normal concentrations of LOTORQ lubricant range from 1 to 3% by volume, or 10 to 30 kg/m³ (3.5 to 10.5 lb/bbl), depending on the fluid density, desired reduction in coefficient of friction and the mud system being used.

After the initial treatment, periodic treatments should be made to maintain the desired concentration. Pills and special applications can require higher concentrations. Treatment levels and product usage depend on the rate of penetration, solids-control equipment and dilution rates.

Pilot testing is recommended especially applications in excess of 149° C (300° F)



Advantages

- Highly effective downhole lubricant for reducing torque and drag
- Reduces the potential for and the severity of differential sticking
- Compatible with low-solids, non-dispersed fluids and reservoir drill-in fluids
- Low greasing and/or emulsion-forming potential
- Non-foaming tendency

Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions described in the Material Safety Data Sheet (MSDS).

Packaging and Storage

LOTORQ lubricant is packaged in a standard pack unit: 200 l (52.8 gal) drums or in bulk; other pack units on request

Store in a dry, well-ventilated area. Keep container closed. Keep away from heat, sparks and flames. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

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