DRIL-L

Rate of Penetration (ROP) enhancer

Product Description

DRIL L is a special blend of surface-active agents to keep the bit free of solids. The unique formulation assists in removing any buildup of drill solids below the bit, allowing the cutters to make continuous contact with new formation, thus increasing the Rate of Penetration (ROP).

Typical Physical Properties

Physical appearance	Yellow to brown liquid
Specific gravity	0.78 – 0.85
Solubility	Insoluble
Flash Point	>201°F (>94°C)

Application

DRIL L ROP enhancer is designed to enhance the ROP performance of water-base mud systems. It is especially applicable when drilling medium-to-hard shales in both onshore and offshore operations.

For ROP enhancement, 1 to 2% by volume of the DRIL L additive should be added directly to the mud system.

After the initial treatment, the product should be continually added or injected into the mud stream at the pump suction while the bit is drilling. The injection rate will vary according to hole size, pump rate, dilution rates, and ROP.

Typically, addition rates may range from 15 to 30 gal (57 to 114 L) per hour of drilling.

DRIL L concentrations of up to 5 to 7% by volume will not affect drilling fluid properties or environmental toxicity.

Advantages

- Effectively increases ROP while drilling all shales
- Improves bit life, reducing the number of trips
- Reduces torque and drag
- Improves mud filter cake quality and lowers fluid-loss values
- Works well with high-performance PDC bits
- Will not induce foaming or aeration of the mud system

Packaging and Storage

DRIL L is packaged in 55-gal (208-L) drums. Store in a dry location away from sources of heat or ignition.