



QDRILL™: Advanced Drilling Fluid System For Highly-Reactive Formations

KEY BENEFITS:

- Less solids in the system
- Promotes improved bond between cement and formation
- Prevents tight hole issues
- Potassium salt dissolved can be used as completion fluid when there is reactive clay in the pay zone
- Environmentally friendly
- Cost-effective compared to other water-inhibitive fluids

QDRILL, an inhibitive, water-based polymer fluid system, is specially designed to help control clay swelling and prevent fines migration in highly-reactive formations that demand water-based fluids. The key component of the QDRILL mud system is a clay-inhibitive salt along with a high molecular polymer. Together, they act to provide mechanical stabilization of the wellbore and enhance drilled solids encapsulation, facilitating the removal of undesirable solids at the surface through the solids control equipment.

The QDRILL system has been designed with usability in mind. The system is easy to mix and inhibitive properties are easy to adjust depending on clay reactivity. Furthermore, the system can be formulated with potassium acetate, sulfate or formate, without any chlorides additions in order to prevent detrimental effects to the underground water table.

The system is also equipped with advanced anti-balling features, meaning tubulars, BHA components, and bit will be clean of the sticky clay that is commonly encountered while drilling young formations.



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A cost-effective alternative to high-performance water-based fluids or oil-based fluids.



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The QDRILL mud system represents a cost-effective alternative to high-performance water-based fluids or oil-based fluids. Cost per barrel and disposal costs are approximately half of those incurred in a non-aqueous system.

QDRILL		
Property	Range	Min / Max recommended
Fluid Weight, ppg (kg/m ³)	9.5 - 18.3 (1130 - 2200)	18.3 Max. (2200)
Plastic Viscosity, cP	ALAP	ALAP
Yield Point, lb/100ft ² (Pa)	10 - 20 (5 - 10)	> 20 (> 10)
Gels, lb/100ft ² (Pa) 10"/10'	2 - 10 / 16 - 30 (1 - 5 / 8 - 15)	As required
pH	9.0 - 9.5	10.0 Max.
K+ ion content, ppb (kg/m ³)	20 - 30 (57 - 85)	As required
MBT, ppb-eq (kg/m ³)	5.0 - 12.5 (14 - 36)	15 Max. (43)
API Fluid Loss, cc/30min	5.0 - 8.0	< 8.0
HPHT Fluid Loss, cc/30min	16 - 24	< 20



We Deliver, No Excuses