

Modibore



ModiBore is a natural, biodegradable mud system designed for general drilling works. It consists of specially prepared polymers of natural origin. Provides high stabilization of the annular space and effective removal of drill cuttings in various ground conditions.

Rheology

ModiBore is a system designed, among other things, to keep the hydraulic pressure (annular pressure drop) as low as possible in order to minimize the risk of near-well damage while optimizing well clean-up.

Although rheological parameters at high shear rates result in high pump pressures and Equivalent Circulation Density (ECD) of the drilling fluid, it is considered that it is the fluid parameters at low shear rates (low viscosity threshold) that ensure effective cleaning of the borehole in horizontal wells.

Modibore thus forms a fluid in which the shear stress is not small, but decreases with increasing shear rate. The rheology curve of this mud system proves that the fluid with these parameters is characterized by ease of preparation (ease of mixing), ease of pumping and flow (circulation).

This fluid is characterized by high parameters at low speeds (high viscometer readings at 3 rpm) from which we conclude with the optimized hole cleaning capacity. At the same time, the system features a flat rheology curve and as low as possible viscosity readings at 600 rpm and 300 rpm to maintain low pump pressures and minimize mud filtration.

The Modi-bore system can be used successfully on large, complex projects, both horizontal and vertical, guaranteeing effective cleaning of the hole. This is due to the concept of the entire system designed to create an effective drilling fluid that ensures maximum stability.

Modibore system's filtration control

ModiBore is a unique polymer system that creates a strong filter cake both in a light polymer mud and solids-based mud in fresh or salt water. This unique ability provides extraordinary stability and protection to the borehole zone. At the same time, the system is easy to apply during work.

Typical filtration results (API fluid loss) for Modi-Bore in a freshwater solution at a concentration of 5kg/m³ is less than 15ml/30ml and drop below 10 l with the use of the solid phase in the drilling fluid.

Modi-Clear and Mikhart drilling fluid additives can reduce mud filtration up to 2 ml/30 min.

Packaging

Modibore is packed in 25 kg bags, 1000 kg per pallet.