



MWOD

Mud Weight on Demand™

Fast and Flexible. Our MWOD™ system allows you to drill with a fresh water system or your own produced water without the addition of solids or salts to achieve your required density.

Enhance Performance Reduce Costs

Mud Weight on Demand™ is a technique developed by the experts at ECD Management that optimizes drilling fluid selection.

Our MWOD™ system allows operators to drill with fresh water or produced water by applying surface pressure to provide additional equivalent density without the addition of solids or salts.

MWOD™ empowers the client to instantaneously increase their mud weight dynamically while drilling. This is achieved with precise fluid chemistry and fit for purpose surface equipment.

Benefits

- Real-time precise control of ECD
- Constant bottomhole pressure during connections
- Manage losses by instantly reducing the ECD
- Improved chemical functionality allows the use of polymers and lubricants to enhance the base fluid.
- Eliminates the risk associated with handling corrosive brines

Overall, the MWOD™ system is designed to reduce fluid cost by up to 40% when compared to current brine drilling fluid systems.

Brine as a drilling fluid is becoming common as a replacement for invert emulsion Oil Based Muds (OBM) in the Montney formation in northeast British Columbia and northwest Alberta.

The use of brine has several advantages over conventional OBM systems. However, brine drilling fluids can present several challenges. In addition to addressing these challenges, the MWOD™ system also has the ability for the ECD to be managed in real-time.



CORROSION

The high salinity of brines can cause severe corrosion of downhole tools. A significant portion of the cost of a brine system is in the corrosion control additives. Fresh water requires considerably less corrosion protection thus reducing the overall cost of the fluid



CHEMICAL FUNCTIONALITY

Several chemicals that could be used to optimize the drilling process are rendered ineffective in high-salinity brines. By using fresh water, traditional polymers can be used to generate viscosity and fluid loss control thus reducing torque and seepage losses while improving hole cleaning.



TORQUE & DRAG

Liquid lubricants suffer saponification and greasing when exposed to high calcium content found in some brines. In addition, the inherent non-lubricious nature of these fluids will also result in higher torque and drag. Our system allows the use of conventional lubricants to reduce the fluid cost.



LOST CIRCULATION

Without the ability to form a filter cake, the use of brine systems can lead to increased losses. The cost of this lost fluid can be significant when it is treated with expensive corrosion control chemicals and lubricants. MWOD™ will reduce losses and the associated costs.