

M2-PLUS* INHIBITED WATER BASED DRILLING FLUID SYSTEM

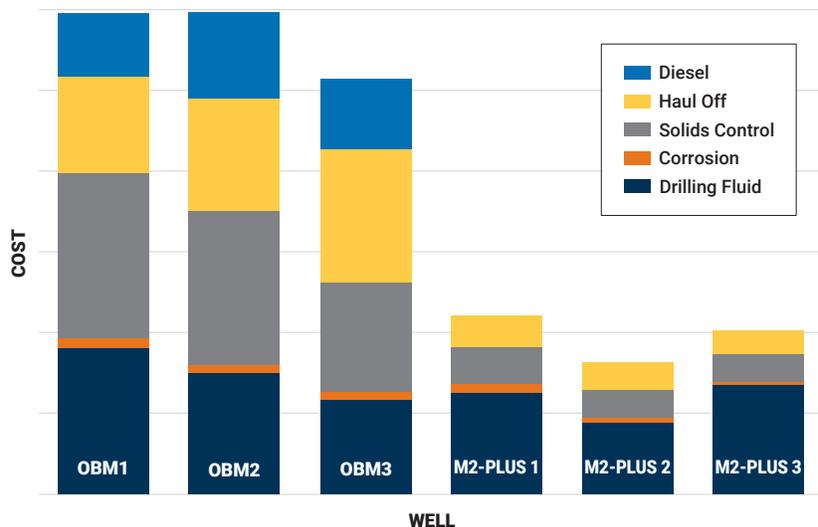
- » The *M2-PLUS* water based drilling fluid system is a low maintenance system with only two proprietary components, *M2-SS shale inhibitor** and *M2-Lube** lubricity improver.
- » The system can be prepared using both fresh water and brines and can perform in mud weights exceeding 16.0 ppg.
- » The system has successfully been used throughout Texas and Louisiana.
- » Core sample testing from multiple formations showed the *M2-PLUS* system inhibited as well as DI water with 2% potassium formate (HCO_2K) and OBM systems under static aging for 7 days at 220°F.
- » In torque and drag testing, the *M2-PLUS* water based drilling fluid system significantly out performed eleven other lube systems at concentrations of 1-3% v/v.

The *M2-PLUS water based drilling fluid system was designed to address environmental concerns associated with oil based fluids, provide shale inhibition, reduce torque and drag, and optimize the total cost of its use.**

This system utilizes water based fluids, the proprietary *M2-SS** shale inhibitor and our proprietary *M2-Lube** lubricant, to create an inhibited system that can replace oil based drilling fluid systems in many areas.

In recent applications, *M2-PLUS* water based drilling fluid has saved customers a significant amount of money and reduced rig time versus oil based fluid systems. This is possible because *M2-PLUS* water based drilling fluid eliminates most diesel usage, lowers solids control costs, eliminates reserve pit clean outs and haul off, lowers rig utilization time, and requires no liquid fluid transportation.

Cost Breakdown M2-PLUS System vs OBM



M2-PLUS* INHIBITED WATER BASED DRILLING FLUID SYSTEM

NOTES:

As shown below, those wells drilled using the M2-PLUS water based drilling fluid have reduced days on well in the production interval by 1-3 days creating significant savings.

Drilling Fluid Depth vs Days

