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(54) **Title:** REUSABLE HIGH PERFORMANCE WATER BASED DRILLING FLUIDS

(57) **Abstract:** Compositions emulate oil based fluids include an aqueous phase and an organic internal phase, which creates an osmotic membrane within the aqueous continuous phase. The osmotic membrane allows hydration-dehydration mechanisms to be in place and control interactions between formation and fluid, where the non aqueous phase comprises glycerols, polyglycerols, poly hydroxyl alcohols, monosaccharide derivatives, polysaccharide derivatives, or mixtures and combinations thereof, while the aqueous phase contains additives that impart different inhibiting mechanisms to the overall composition, where the additives include, without limitation, amphoteric polymers, potassium and/or sodium salts up to saturation and/or polyacrylamides.

