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Title: Application of Aluminium Oxide Nanoparticles to Enhance Rheological and Filtration Properties of Water Based Muds at HPHT Conditions

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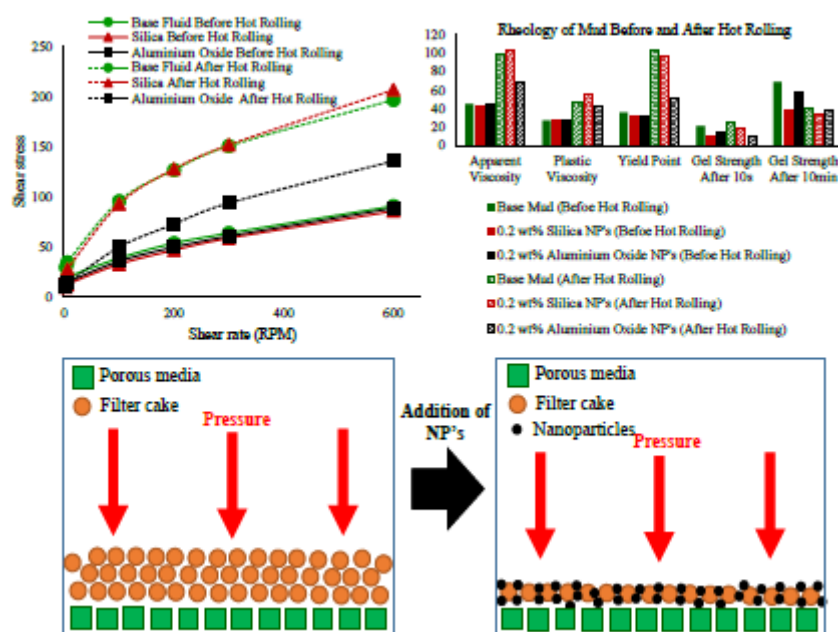
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Graphical abstract



Abstract

Drilling fluid is one of the most important elements of any drilling operation, and through ever advancing technologies for deep water and extended reach drillings, enhancement of drilling fluids properties for such harsh conditions need to be investigated. Currently oil based fluids are used in these types of advanced drilling operations, as their performance at high pressure and high temperature conditions, and deviated wells are superior compared to water based fluids. However, the high costs associated with using them, and environmental concerns of such oil base fluids are

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