An Evaluation on the Methodology of Manufacturing High Performance Organophilic Clay at the Most Efficient and Cost Effective Process

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Abstract : Organophilic Clays, also known as Organoclays, is used as a viscosifier in Oil based Drilling fluids. Most often, Organophilic clay are produced from modified Sodium and Calcium based Bentonite. Many studies and data show that Organophilic Clay using Hectorite based clays provide the best yield and good fluid loss properties in an oil-based drilling fluid at a higher cost. In terms of the manufacturing process, the two common methods of manufacturing organophilic clays are a Wet Process and a Dry Process. Wet process is known to produce better performance product at a higher cost while Dry Process shorten the production time. Hence, the purpose of this study is to evaluate the various formulation of an organophilic clay and its performance vs. the cost, as well as to determine the most efficient and cost-effective method of manufacturing organophilic clays.

Keywords: organophilic clay, viscosifier, wet process, dry process

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