

## عنوان مقاله:

Optimize the Performance of a Variety of Inhibitors from Adhesion of Clay to Drill

## محل انتشار:

دومین کنفرانس دوسالانه بین المللی نفت، گاز و پتروشیمی (سال: 1397)

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## خلاصه مقاله:

Drilling problems in active shale is one of the key issues considered in the oil and gas industry. During drilling operations in the shale formations and use of drilling fluid water base, because of the sensitivity of the shale in terms of physical and chemical properties of water absorption by clay minerals, incompatibility between the clay and fluid causes swelling and loss, and problems such a well instability, drill pipe sticking and create the bit balling. Despite the good performance of oil – based drilling mud for drilling in shale problems, these muds shortcomings such as environmental pollution, waste disposal problems and high costs are with them. Water – based drilling muds are options or replace the lubricating oil based mud. Occurrence drill bit balling problem is more in soft shale formations and PDC drill bits and other reasons such as excessive weight on the drill bit, low ROP, mud weight and .... That are involved the escalation of this issue, Since 70 to 80 percent of the drilled formations in the world are shale and clay stone, therefore with regard to economic issues in order to reduce the cost or wells, by adding a series of controlled substances and inhibitor such as Glycol, Lubricity Agent; PHPA, KCL and .... In order to prevent shale reaction with water or alleviate the stickiness of clay to drill bit according to laboratory studies has been tried. In this study, by adding different in terms of features and performance with Bit Balling Removal Test to determine the most optimal .concentrations and comparing these additives with respect to time in order to overcome this problem have been tried

## کلمات کلیدی:

.Shale Formation, water– based drilling fluid, swelling clay, Bit balling, inhibitor

## لینک ثابت مقاله در پایگاه سیویلیکا:

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