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Indigenous Bentonite Characterization as a Drilling mud in oil and gas Industry

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***Abstract*—Minerals are the most important source of life in our earth. Mud bentonite is also one of them abundant and near to the ground price naturally accruing substance originate largely in the whole earth Bentonite mud is produced after volcanic ash has weathered and old in the presence of water. It has some exceptional properties. Bentonite has a physically powerful negative electromagnetic charge and when stimulated inside to the water. In the current research, two samples of bentonite were taken, one is Indigenous raw bentonite and other is industrial bentonite. The indigenous raw bentonite is analyzed in terms of viscosity, Gel Strength, Density. After being analyzed indigenous raw bentonite is purified and in last step these two bentonites are compared in terms of given parameters and can be proposed the optimum one. The results of indigenous raw bentonite are shown in XRD x-ray diffraction. The other industrial bentonite as viewed from literature review have low values of viscosity, gel strength and density and that results in better quality of indigenous raw bentonite as compared to the other industrial bentonite.**

***Keywords* —Bentonite, Drilling Mud, Purification, Grinding, Dispersion, Centrifugation**