MINERALOGY OF PALYGORSKITE DEPOSITS NEAR OCHLOCKNEE, GEORGIA, NORTHEASTERN THOMAS COUNTY

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Palygorskite, sometimes referred to as "fuller's earth", is a fibrous clay of sedimentary origin that is widely used in industry as a filtering agent and as an absorbent. Palygorskite is heavily mined along a trend extending from Meigs, Georgia, to Quincy, Florida. A local variety known as attapulgite is formed from a mixture of palygorskite, smectite and montmorillonite clays. The palygorskite occurs in the Meigs Member of the Coosawhatchie Formation of the Miocene Hawthorne Group. These clay deposits occur in a poorly understood Miocene paleo-deposition feature known as the Suwannee Straits or Gulf Trough that served as an open seaway between Georgia and Florida from the Cretaceous to the Tertiary. This study examines samples of palygorskite from several quarries operated by the Oil-Dry Corporation near Ochlocknee, Georgia. These samples will be characterized using SEM, XRD, and chemical analysis to determine if there is any variation in the clay along strike.