

Summary Report on the occurrence and character of a clay bed underlying the townsite of Albany, Albany County Wyoming.

The following report is the result of investigations made by the writer in September 1932.

Geological occurrence: The clay bed underlying the townsite of Albany is geologically associated with an erosional remnant of Tertiary sediments which cover an extensive area to the southeast of the townsite. It is in no way associated with the Benton formation of Cretaceous age in which typical Bentonite deposits of Wyoming occur. The following geological cross-section illustrates the relationship of the Albany clay bed to the Bentonite deposits which occur along the west flank of Sheep Mountain- some four miles to the northeast of Albany.

The clay bed underlying the Albany was deposited during mid-Tertiary time (exact age unknown) many millions of years after the depositing of the Benton formation and its included Bentonite beds.

The clay bed rests either directly upon or close to the pre-Cambrian granite which outcrops just west of the townsite. It is covered by gravel wash from the mountain to the west. Its thickness is probably extremely variable owing to the unevenness of the floor upon which it was deposited and to the fact that much of the original bed has been removed by erosion. As near as could be determined its thickness varies from zero to several feet.

Character: No detailed petrographical analysis of this clay has been made by the writer. From its field occurrence and general character it appears to be

a sedimentary clay made up of the decomposed products of the adjacent granite area with possibly additions of volcanic ash which was added at the time of deposition. The presence of large amounts of coarse impurities, such as grain of quartz and feldspar- such as characterize this clay are not common to typical Bentonite.

Owing to the irregularities of its occurrence and large amounts of impurities this clay in my judgement has no commercial significance.

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