

State Department of Geology and Mineral Industries

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Date: Sept. 13, 1943

Parker Ranch Clay

Lane County.

Decomposed arkosic sandstone has given rise to material that may have use as a refractory clay, and if washed, as a molding sand.

Owner: W. L. Parker, Crow Stage, Eugene, Oregon.

Location: N.W. $\frac{1}{4}$ N.E. $\frac{1}{4}$ sec. 23, T. 17 S., R. 6 W., N.N.W. of Elmira, and 3.2 miles from a railroad siding at Veneta.

Area: 382 acres, of which a minimum area of 600 ft. by 2000 ft. is underlain by the clay material. An additional 69 acres on the south is owned by the Oregon Clay Co., of Portland.

History: In 1938 L. A. Laws, Portland, Oregon, became interested in the clay possibilities at the ranch. He organized the Oregon Clay Co. which purchased 69 acres from Parker. The clay resources of the rest of the ranch were organized as the Elmira Clay Co., of which Mr. Parker is president. On Sept. 10, 1943, the ranch was visited by W. D. Lowry and R. C. Treasher of the Dept. staff and samples of the material were taken.

Development: Several 4-inch auger holes have been put down in the valley flat. One test pit has been dug on the hillside about 75 feet higher elevation than the clay deposit.

Geology: The country rock is an arkosic sandstone which is presumed to be part of the Spencer (upper Eocene) formation. Feldspar in the sandstone has been softened somewhat, and under favorable conditions, the feldspar is altered to clay. The weathered sandstone consists essentially of quartz, fine flakes

of muscovite, and clay. Almost no iron - bearing minerals are present.

Normally, the clay material has a light gray color but it may be light yellow as a result of iron stain.

Clay material was found by auger holes underlying portions of the minor - valley floor and a short distance up the hillsides. Above this, the rock is less decomposed and the feldspars are not reduced to clay. It would appear that the clay lies within the zone of fluctuating water table. Augering suggests that the clay area may be 6 00 feet wide by 2000 feet long and four feet thick under an overburden of one to three feet of soil.

Samples were taken of material from the auger holes for testing.