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MINERAL RESOURCE SURVEY
Circular No. 27

A mineral resource survey of Texas is being conducted by the Works Progress Administration, the Bureau of Economic Geology of The University of Texas acting as sponsor. The purpose of the survey is to assemble information and make it available to the public. The mineral resource survey is helping in the location of mineral products, from some of which it is reasonable to suppose industries of value to the State may be developed. The following report is based on work done in Fayette County.

REPORT ON THE MINERAL RESOURCES OF FAYETTE COUNTY, TEXAS
by J. J. Sedlmayer, Supervisor

LIGNITE

Wells drilled for water and oil reveal that a large lignite deposit underlies an area a little west of the center of Fayette County. In many places this deposit is from 40 to 60 feet beneath the surface. However, just west of Flatonia, lignite was seen in a water well about 10 feet beneath the surface. A pit 6 feet square was dug 1 mile northwest of Flatonia in the southwest corner of Chas. F. Wright league. Lignite of good quality 4½ feet thick was found 6 feet beneath the surface. Three-inch drop auger holes were drilled in a northeasterly direction, and the deposit was found to extend for 1 mile. It is narrow, being only 75 to 100 feet in width.

Lignite is exposed in Emerson Creek southeast of Muldoon. Five miles northeast of Muldoon near Lena switch on the Southern Pacific Railroad this deposit outcrops. Ten to 12 feet beneath the surface the lignite is 12 feet thick and wider than the deposit noted above. From water well records the deposit was traced eastward from Plum, crossing the Missouri-Kansas-Texas Railroad 4 miles west of La Grange. At this point there are indications of a very large deposit of lignite. On the west bank of Colorado River a large exposure of lignite is present, measuring 610 feet long and 18 feet thick. Twenty-five feet of gravel and soil cover this lignite. Other lignite was seen along highway No. 44.

VOLCANIC ASH (PUMICITE)

Four miles north of Flatonia on the Chas. F. Wright league outcrops of altered volcanic ash were investigated. One pit and 20 drill holes were completed, outlining about 25 acres. This is mostly ash altered to clay, which is highly stained by iron oxide. This deposit is probably of little value. Adjoining the eastern part of this deposit is a bed of pure volcanic ash about 10 to 12 acres in extent. Seven test holes were dug in this deposit, and the thickness ranges between 5 and 8 feet with an overburden of 3 feet. This ash is very fine in texture. To the southeast of the above-mentioned clay area is another deposit of cream-white volcanic ash. A number of holes were drilled in this deposit, and it ranges in thickness from about 4 to about 12 feet, with about 4 feet of overburden.

The eastern part of Fayette County is practically devoid of gravel deposits. On the west side of the river, however, there is considerable gravel in a 2-mile strip extending from West Point to La Grange. To the east of Colorado River, extending to the Bastrop and Lee County lines, abundant gravel deposits are present. At present, one company is operating on a river terrace near West Point, marketing gravel and sand for building purposes. The most abundant supplies of gravels are centered in and around La Grange and both east and west of Ellinger.

LIMESTONE AND CALICHE

One mile southwest of Flatonia along highway No. 95 to Moulton, the State Highway Department opened a pit in caliche. Eighteen to 20 feet of this material was penetrated. This material was used for a road base in that area. This material is of value only for road surfacing. Another deposit of caliche was investigated for the Highway Department at Colony. This deposit was utilized as a base for highway No. 25 between Flatonia and Smithville.

BUILDING STONE

A hard flint-gray sandstone deposit outcrops in many places from the Gonzales County line in the J. S. Menefee league to the Muldoon league at Lena. Some hard rock is present 3 miles west of Flatonia on the old Waelder road. Some of this stone is being used for park benches and terracing ditches along roads and highways. A large area of building stone is present between Muldoon and Buckner Creek on the West Point road. This stone splits very evenly and is hard and durable. The Fayette County courthouse is faced with this stone which is in a perfect state of preservation after forty years of service. Much of this deposit is without a cover of top soil or timber, and it is located along the Southern Pacific Railroad and is also accessible to a good all-weather road.

BENTONITE AND OTHER CLAYS

Many of the clays examined may be classified as fuller's earth. Much of the material, however, is bentonite, and all of the localities examined in the following description have been termed bentonite. The bleaching tests are not available for these various deposits, and their value as a fuller's earth is unknown.

Deposits of bentonite or fuller's earth extend from 3 miles east of West Point in a southwestern direction through Fayette County, entering Gonzales County 4 miles west of Flatonia. A 35-acre bed of bentonite was found at Lena switch on the Southern Pacific

Railroad. There is 5 feet of overburden on this deposit. This deposit adjoins that owned by the Texas Company. On the east side of the railroad across from The Texas Company plant a number of test holes were made on the Melcher property. Twenty-five acres of bentonite from 8 to 12 feet thick was found. In the northeastern part of the Jas. Parrot league 30 acres of bentonite, 8 to 10 feet in thickness, were found. One mile west of Flatonia 60 acres of bentonite are present. The overburden averages 4 feet in thickness, and the bentonite in places is 25 to 30 feet thick. Three miles west of Flatonia in the C. Williams league a large deposit of bentonite was found. This deposit extends into Gonzales County. The portion of the deposit in Fayette County averages 10 feet in thickness.

One mile southwest of Flatonia in the White Hills section a large deposit of clay was test-pitted. This clay contains a small amount of lime and is 4 to 12 feet in thickness. Two bentonite pits are in operating west and northwest of Muldoon on shallow deposits. This bentonite is about 3 feet thick, and to the southwest auger holes show it to range between 2 and 5 feet in thickness. In the northeastern part of the McGowan league, 1 mile from Colony, a 25-acre deposit of cream-white bentonite is present.

METEORITES

During the mineral resource survey work, two meteorites were located and secured for exhibition. One of these meteorites, weighing 25½ pounds, is part of the Cedar fall and was obtained from Mr. C. Rainosek, 7 miles south of La Grange. The other meteorite, weighing 17½ pounds, is part of the Bluff fall and was secured from Mr. Louis Hausmann, 3 miles south of La Grange. In addition, another meteorite of the Bluff fall, weighing about 30 pounds, was found in the possession of Mr. Geo. Burns of O'Quinn. Additional information about these meteorites will be found in the Catalogue of Texas Meteorites which will be published by the Bureau of Economic Geology, The University of Texas.