

Geological Formations

To Be Checked.
3-13-38
Pulaski Co. Gazette

Pulaski county residents knowing of unusual or peculiar geological formations have been requested by R. C. Beckstrom, late director of the mineral survey being conducted by the WPA, to report such features to Carl Burkett, county director, at the courthouse.

Unusual formations will be investigated to determine location of possible mineral deposits. Name of the property owner, section, township and range should be made available to Mr. Burkett. The mineral survey includes an inventory, classification, estimated quantity and potential economic value of known mineral deposits.

Mineral Test Laboratory Planned

Gazette Pulaski Co.

8/21/38

Construction of a laboratory for testing materials obtained in the statewide mineral survey being conducted under sponsorship of the Arkansas Geological Survey will start within a few weeks, Dr. George C. Branner, state geologist, said yesterday.

It will be located at the west end of the old penitentiary walls in Little Rock, and will be built as a WPA project sponsored by the Geological Survey. Brick from the "walls" will be utilized in the construction.

Plans for the building are being prepared by Ross E. Vandruff, assistant director of the mineral inventory project. It will contain a clay-burning kiln for the testing of clays, an analytical laboratory for the analyzing of limestone and other deposits, and facilities for testing well water. There will be a large storeroom for the storing of samples of minerals and building stone located by the Survey.

3,000 Samples Assembled.

Dr. Branner said more than 3,000 samples had been assembled from 32 counties by workers on the survey project, organized last January.

R. C. Beckstrom, director of the project, which will include a survey of 52 counties either in part or whole, covering 35,515 square miles, reported last week that 14 per cent or 5,192 square miles of the area had been studied.

In the 32 counties surveyed, reports have been made on a total of 3,745 water wells, of which 1,969 or about 53 per cent are "soft" water wells, and 1,752 are "hard" water wells. Average cost of the survey per square mile, Mr. Beckstrom said, has been about \$15.60.

Mineral Find

At Mabelvale

Is Soil Boon

Democrat 1-8-38

Pulaski County Survey Reveals Cheap Source of Fertilizer.

A huge limestone deposit near Mabelvale estimated at 1,000,000 cubic yards, which was discovered some years ago, and then apparently forgotten, has been relocated and should be a boon to Pulaski county farmers, Robert C. Beckstrom, state WPA mineral survey supervisor, said yesterday.

The "quarry" lies about two and one-half miles west of Mabelvale on Fourche creek, and near highway 70 and is easily accessible. New analyses show it to contain more than 10 per cent calcium carbonate, making it suitable for agricultural purposes, particularly in rendering land usable for alfalfa and the like.

"At the present time, Pulaski farmers are paying \$2.65 a ton for crushed limestone brought in from the northern part of the state, but by using the material found within their own county, considerable money would no doubt be saved on cost of material, with the shipping cost virtually eliminated," Beckstrom said.

The WPA mineral survey office at 117 North Victory street, Little Rock, will be glad to furnish farmers with information as to ownership and the like, if requested.

The mineral survey of Pulaski county has brought forth some other interesting facts.

Good for Roads.

In the west central area of Big Rock township, in and near Geyer Springs, have been found several deposits of quartzitic gravel, a material well adapted to road surfacing because it breaks down slowly and forms its own binder. This gravel runs about 80 per cent metal and 20 per cent clay. The largest deposit of this road-making material is owned and operated by Pulaski county.

In the extreme southwestern part of the township—four miles from Mabelvale—there is a large amount of kaolin clay which, while of low grade, is fairly plastic, suitable for earthenware pottery. The west central area of this township holds some of the best kaolin yet found in Pulaski county. A sample of this was analyzed by the chief soil chemist of the State Highway Department, who pronounced the alumina percent present to be exceptionally high. In a well drilled by Sam Parker at Mabelvale, strata of kaolin were found to a depth of 86 feet.

Slate Near Ferndale.

In the regions lying between Ferndale and Pinnacle are large deposits of slate mixed with sandstone and quartz. About three miles north of this village is a dike of sandstone 1,500 feet in length and 20 feet high. Shinall mountain, which covers several sections of land is composed of shale with a covering of sandstone. Pinnacle mountain (one of the four points called Maumelle pinnacles) is composed of sandstone, and Blue mountain is of the same formation.

The survey of the water situation in this part of Pulaski county has been one of interesting discoveries. In many instances the people, on hearing of the work of the project, urge the workers to come and inspect a peculiar well on their property. There is the one from which the water when taken is clear until boiled, when it produces a thick sediment.

Large Area Inspected.

Of the 779 square miles within the bounds of Pulaski county, 337 are to be investigated by the field workers under the direction of Carl C. Burkett, county supervisor. This territory includes seven townships, all lying south of the Arkansas river. Up to this time, approximately 200 square miles have been covered by the surveying crew.

Minerals located thus far in the survey in Pulaski county are lignite, limestone, quartzitic gravel, slate and kaolin clays.

One of the first tests made was on the grounds of the Confederate Home near Sweet Home, where lignite was found at a depth ranging between 15 and 20 feet, and in thickness from 15 to 30 feet. About five miles southeast of Mabelvale, near U. S. highway No. 167, lignite was also located in land owned by Sam

Parker, who states that the stratum is 56 feet thick. Because of the abundance of other fuels in Arkansas, lignite has never been produced commercially, although it is used in small quantities for domestic purposes in some localities.