Reports Say 'Ghost Town' May Revive
Gazette 10-30-38

By CURTH S. MOORE.

Evening Shade, Oct. 29—Shark's ghost town, Calamine, may return to life. Sixty years ago lead and zinc were being mined and smelted in large quantities at Calamine. Ex- cept for a few dirt roads the original company had been purchased and installed by the Arkabuck Mining Company and eastern syndicates.

A "ghost town," which also served as a sort of clubhouse for workers, was erected near the population of that end of the county worked in the mines and smelting plants. The town received its name for the place where the ores were found. The largest bodies of ore were just beginning to be touched, old timers will tell you. The deposits were apparently almost inexhaustible, they say.

Shutdown Unexplained.

Suddenly something happened. What was it, is still a mystery. Everything was going full blast. In fact, the residents will tell you that preparations were in the offing to enlarge the works. The laborers were disbanding, and even some of the community were talking of coming back and settling down.

They were preparing to close down. Much of the equipment was carried away. Pipes were used to run water into stock pits. One may occasionally see a few old ore cars rusty in the extreme western part, dolomite has been found in bluffs from 20 to 300 feet in height. There the stone is pink and is believed to be the finest of this color found in the country. A few fine gravel, valuable for road building purposes, has been located near Viola, the deposit being 900 feet long, 80 feet wide and 20 feet deep. It is estimated to contain 20,000 cubic yards. In an adjoining section another fine deposit of gravel was found covering about four acres. The estimated amount being 400,000 tons.

Considerable information concerning Mammoth Spring has been accumulated by the survey. It is one of the largest springs in the United States, its flow varies from about 250 to 300 cubic cubic feet per second. The water is "hard," containing about 158 parts per million of lime and water 2,000 of magnesium. The summer temperature of the water is about 58 degrees.

Besides Mammoth Spring, the survey examined and listed 22 other wells and 118 springs. The average depth of the wells is 60 feet. In the western and southwestern parts of the county dug wells range in depth from 10 to 42 feet. Only in rare instances is soft water found. In this section the drilled wells range in depth from 60 to 190 feet. The water is almost all wells is hard.

Survey Lists Deposits In Fulton County
Gazette 9-11-39

By TOM SHARAS.

Salem, June 16—The Fulton county mineral survey, conducted as part of the statewide WPA mineral survey sponsored by the state Geology Department, has located large deposits of tripoli, dolomite and lead building materials, particularly gravel.

The survey, under the direction of Richard Brewer, county supervisor, been extended pretty well over the 40 square miles, designated for study. Besides mineral, and lead building material deposits, the survey has reviewed the location of streams, later, water well and springs and has analyzed their waters.

Until this survey was started, the known deposits of tripoli in Arkansas were in the western and southwestern sections. Deposits discovered recently in Fulton county are in the extreme western and southwestern sections, near Mammoth Spring, Elizabethtown, Viola, Bear, and Argo and Argosy.

Many Uses for Tripoli.

Tripoli is a form of finely divided silicate. The action of water has dissolved the calcite in the rock, leaving soft, porous, white slices. This material is easily crushed and is used exclusively as a polishes. It is also used in the manufacture of cement, the making of soap powder and as a filler for certain grades of paint. A deposit of this material 11 miles south of Mammoth Spring, is being utilized for the manufacture of a household cleaner by a company in Hardy. This deposit is about 15 feet thick and covers an area of about 20 acres. The cleaner manufactured from it is trompe land, dusting and polishing glass, metal surfaces and painted surfaces.

Tripoli deposits near Bear and Wild Cherry were located by outcappings along road ditches. At Bear the exposed surface of one deposit extends about 80 feet, the thickness of the deposit being about 2 feet. The outcapping near Wild Cherry has a 300-foot "face" and the deposit covers about 20 acres.

About eight miles north of this deposit, near Viola and Argosy, is a deposit running in depth from six to 10 feet. It has an overburden of sandy soil, about six feet thick.

Dolomite Plentiful.

Fulton county has large deposits of dolomite, which is valuable as a building stone and for other uses. It is a good mineral fertilizer, is used as an admixture in the manufacture of lime and in stoves. This valuable stone is found nearly all sections of the county, the thickness of the beds varies from less than 1,000 feet to more than 5,000 feet.

In the vicinity of Mammoth Spring, the rock occurs in bluffs from 15 to 60 feet high. Some of the deposits are crumbling and contain sandy and porous. Others are hard, light-colored and fine grained. According to the survey, dolomite in the extreme western part, dolomite has been found in bluffs from 20 to 300 feet in height. The stone is pink and is believed to be the finest of this color found in the country. A few fine gravel, valuable for road building purposes, has been located near Viola, the deposit being 900 feet long, 80 feet wide and 20 feet deep. It is estimated to contain 20,000 cubic yards. In an adjoining section another fine deposit of gravel was found covering about four acres, the estimated amount being 400,000 tons.

Considerable information concerning Mammoth Spring has been accumulated by the survey. It is one of the largest springs in the United States, its flow varies from about 250 to 300 cubic cubic feet per second. The water is "hard," containing about 158 parts per million of lime and water 2,000 of magnesium. The summer temperature of the water is about 58 degrees.

Besides Mammoth Spring, the survey examined and listed 22 other wells and 118 springs. The average depth of the wells is 60 feet. In the western and southwestern parts of the county dug wells range in depth from 10 to 42 feet. Only in rare instances is soft water found. In this section the drilled wells range in depth from 60 to 190 feet. The water is almost all wells is hard.
Work of Mineral Survey in Fulton County

In March 1938, a Mineral Survey conducted by WPA workers and sponsored by the State Geological Survey began work in Fulton County. Locally the work was under the direction of Richard Brewer, County Supervisor. His sixteen assistants are authorized WPA registrants of Fulton County.

Of the 625 square miles in Fulton County’s area, 486 were designed for investigation. Besides the mineral deposits, this survey is recording the exact location of streams, lakes, water wells and springs, and submitting samples of their water for analysis. The railroads, highways, power transmission lines, bridges, dams, all are being recorded on the field sheets of the workers, who walk over the entire area section by section. This latter information is being used to correct errors in published county maps.

The minerals located and mapped thus far, those of most importance commercially are tripoli, road marking materials and dolomite.

Until this Survey was begun the known deposits of tripoli in Arkansas were in the western and northwestern parts of the State. That recently discovered in Fulton County is in the extreme western and southwestern sections, within four miles of the settlements of Elizabeth, Bexar and Wild Cherry. The deposits near Bexar and Wild Cherry are found in road ditches. At Bexar the exposed surface extends for 30 feet, the thickness being about 20 feet. The outcrop near Wild Cherry has a 300-foot face and the deposit covers 200 acres. Approximately 8 miles north of this deposit in the vicinity of Argo and Viola, a deposit ranging in depth from 6 to 8 feet, in a 20-foot pit, to a 10-foot bluff near Viola. Both deposits have an overburden of sandy soil about 6 feet thick. Tripoli is a form of finely divided silica, which, in Fulton County, is derived from the leaching of siliceous limestone. The action of the water has dissolved the calcite in the rock, leaving soft, porous, white silica. This is easily crushed and is extensively used as a polish in the manufacture of dynamite and other explosives, and in the manufacture of cement, soap powder and as a wood filler by paint makers.

At a point in township 20, N., R. 5 W., about 11.5 miles south of Mammoth Spring and within 2 miles of May Island, a deposit of tripoli covering 20 acres with a depth of 18 feet is being utilized for the manufacture of a household cleanser by a company in Hardy, Ark. This new industry began operation in February, 1938. Samples of this material were sent to the laboratory in Little Rock by Mr. Brewer and showed the following:

- Silica: 81.70 per cent.
- Alumina: 13.76 per cent.
- Moisture: 3.89 per cent.
- Ferric Oxide: 0.34 per cent.
- Calcium Oxide: 0.19 per cent.
- Alkalis: 0.02 per cent.

Total: 99.99 per cent.

The cleanser is recommended by its manufacturer for cleaning and polishing glass, paint and metal surfaces.

Road making materials, consisting of chert and gravel, are found in different parts of the county. Small, loose chert is scattered over almost the entire area. Gravel of a quality adapted to road making has been located by the Survey in the western part, about four miles north of Viola. This gravel is in a creek bed, the deposit being 900 feet long, 80 feet wide and 8 feet deep, estimated to contain 20,000 cubic yards. In the adjoining Section (S. 3, T. 20 N., R. 10 W.) gravel covers an approximate 4 acres, the estimated amount being 480,000 tons. The Survey has listed several deposits, easily accessible, with details as to quality, for the State Highway Department.

In mineral terms, dolomite is described as a magnesian limestone. It is found in beds, like limestone. While its chief use in Arkansas has been that of a building stone, it is also valuable as a mineral fertilizer, as a flux in smelters, in the manufacture of lime and in calcimine and stucco. In Fulton County, dolomite is found in nearly all sections; the series of dolomite beds which underlie Fulton County have an estimated thickness of more than 2000 feet. In the vicinity of Mammoth Spring the rock occurs in bluffs from 10 to 60 feet high; some deposits are crumbly and brittle, sandy and porous, others are hard, light colored and fine grained. It is one important mineral used in the manufacture of mineral wool. Across the county, in the extreme western part, one mile from Viola, dolomite has been found in bluffs from 20 to 300 feet in height. At this point the mineral is pink and believed to be the first of this color found in Fulton County.

Thus far the Surveying crew has examined and listed 286 water wells and 118 springs. The average depth of the wells is 60 feet. In the western and extreme southwestern parts of the county the dug wells range in depth from 10 to 40 feet; only in rare cases is soft water found. In this same section the drilled wells have a range of depths between 50 and 190 feet. The town of Mammoth Spring does not use the spring water for municipal purposes, but has a well 350 feet deep, serving a population of 650; the daily consumption of 5000 gallons is supplied by a tower tank with a capacity of 7,500 gallons per day. Many families in Mammoth Spring have private wells or springs. Because of the quality of the water over the county, cisterns are used for soft water storage, and they are numerous in all parts. The depth of these reservoirs vary between 14 and 35 feet. The data collected on wells and springs will be valuable in determining the position of the water table and the yield of wells in Fulton County for different seasons of the year. This will also be useful in determining future ground water supplies for domestic and municipal use.

Mammoth Spring is one of the large springs of the United States. The summer temperature is 83 to 89 degrees. Its flow varies from about 250 to 350 cubic feet per second or from about 112,000 to 150,000 gallons per minute. The water is hard, having about 158 parts per million of lime and 139 parts per million of magnesia.

The Survey in Fulton County has given particular attention to the locating and recording of all monuments, witness trees and bench marks of Land Survey divisions. Each section corner is described, and where no marker is in evidence, notation is made to that effect. The survey has found that county maps now in use contain a number of inaccuracies, especially in the northern part of the county where exact sections are not even shown. In some instances the roads have been found to be a mile off the location indicated. These corrections will be seen on the new maps which will be made from the recorded data of the Survey.

When the Survey is completed, all records, sample and reports on analysis of minerals and waters will become the property of the State Geological Survey. From this George C. Branner will compile and issue bulletins on the minerals and waters of Fulton County, which will be available to those interested.

The State offices of the Mineral Survey are at 117 N. Victory Street, Little Rock. Robert C. Beckstrom is the State Supervisor, and R. E. Vanduff is the Technical Supervisor of the project.