OZARK AND OUACHITA MOUNTAINS
OF ARKANSAS CONTAIN NUMEROUS
PRECIOUS, SEMI-PRECIOUS GEMS

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Pike Co. Gazette

COUNTY

By TOM SHINAB.

Diamonds and other gemstones are found in Arkansas, particularly in the Ouachita and Ozark Mountains. Arkansas probably has more varietals of precious and semi-precious stones than any other state in the Union, and Pike County is the only place on the North American continent where diamonds occur in place in a peridotite pipe.

For nearly a century, settlers traveled a trail that led across this pipe, and cursed it in wet weather, because it was slick and hard to drive a loaded wagon over. They called it soapstone. In 1869, John C. Braden, state geologist, prospected it periodically, but because no one had ever found a diamond in it, refrained from classifying it as diamond bearing.

"Discovered" in 1886.

In August, 1906, 17 years later, John Wesley Huddleston picked up the first stone, and a few hours later another. The bank at Murfreesboro, offered him 50 cents for the pair. John "knew that if they weren't worth more than that he would throw them away." He finally cashed in on his discovery for $350,000.

Like many other prospectors, he bet his all on the land on which the pipe was discovered would make him rich. But John wasn't betting on diamonds. His theory was that this peculiar looking formation was gold bearing. He staked it and didn't find a color, then he found diamonds.

Before he bought the land on which he found the stones, he was a tanner, owning a small farm near Murfreesboro. He sold his farm for a few hundred dollars, under the pretext of ill health, and made the first payment on the land on which the diamond pipe is located.

Little Rock financiers paid him a handsome profit on his investment. But a few years ago in an interview, he said: "If I knew as much about diamonds then as I do now I'd make a million."

Processing Diamonds.

Diamonds have been mined in Arkansas since 1866. Operations have been spasmodic, not continuous. Much of the same methods are used as are used in South Africa, which is a process of elimination. The diamond formation slacks like shale when exposed to the air. For this reason the pipe is cut all about 12 feet wide.

The first process it passes through is washing. One hundred loads, or approximately one ton of solids, are washed out of the pipe per day. The products are diamonds and a few of other stones. These stones are composed of small pieces of iron ore of several kinds, quartzite, jasper pebbles and the diamonds.

The diamonds are separated from these solids by two methods. The first is hand picking. The mass is dumped in a pan-top table and carefully loaded over, for the gems. The other method is known as the grease-board method. A simple grease-board is nothing more than a shallown bowl about 16 feet long and three feet wide. The bottom is smeared to a depth of a quarter of an inch with heavy grease. It is set at an angle of 30 degrees and the solids flushed over it with water. The diamonds adhere to the grease, the rest of the material is carried on over into the waste dump. Why does the diamonds adhere to the grease? A rough diamond is naturally greasy as a duck's back. For that reason it presents a dry face on the grease, and the grease presents a dry face to the diamond and they cling together. The rest of the material being wet all over, is flushed over the board, by a film of water between 1 and the grease.

Types of Diamonds:

Over several years, just washing in the earlier days of the field, a company got an average of 18 carats of diamonds to every 100 loads of dirt washed. Most of the stones are distorted octahedrons. They run in white, yellow, canary, and black, the latter called drabs. Only a small percentage of the stones found are gem stones, the rest being classified as commercial stones.

PIKE'S MINERAL SURVEY ABOUT READY TO BEGIN

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A state-wide mineral survey, employing 450 workers, was initiated in 31 counties Tuesday by the state Works Progress Administration under sponsorship of the Arkansas Geological Survey. Headquarters are at 117 Victory street, with Robt. C. Beckstrom as supervisor.

PIE'S MINERAL SURVEY IS UNDER WAY

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Thirteen men are training to make the survey in Pike County. The workers are all certified from the WPA rolls. All the men are manifesting great interest in their work. These expressions are heard many times each day. "I like this work." "This is interesting." "I am learning interesting things."

The object of the survey is to locate and map the mineral resources, the water supplies and structural materials of Pike County. This is of much value to land owners and business interests of Pike County.

All the information the State Mineral Survey obtains will be made available through regular official channels to land owners and the public in general in the near future.

The County and WPA officials are cooperating.

Pike County Has Asphalt

Pike County 1938

Abandoned Mine Found and Other Minerals as Result Survey.

Hot Springs (P) - Rev. E. Mose, district supervisor of a state geological survey conducted as a WPA project, said today that an abandoned mine in Pike County had been found to contain sufficient asphalt to pave many miles of road.

Mose is in charge of a survey which was started last April. It has been extended into nine counties in this section of the state and, he said, will have a report ready in the next several weeks in 11 counties.

Found in Polk county, he said, were great outcroppings of manganese red and black and green slate, probably in the quantity of a million tons. He said the product is valuable for roofing, panel boards and other uses.

"In Garland county we discovered new oozing spots of Novaculite," he said. "This is considered a very valuable stone and has been produced in commercial quantities."
The Plastic Clays in the Delight areas are of potential value. They are found in abundance where the overburden, in many places, is gravel, which could be used as road material. The clay is suitable for “drilling mud” in the oil industry and for a base in the manufacture of certain grades of paint. The most important kaolin deposit found so far in Pike county by the survey is located about 2 miles east of Murfreesboro. The color varies from pale blue—which bleaches white—to red. The thickness of this stratum varies from 7 feet to 11 feet. About three miles southeast of Murfreesboro, a deposit of approximately 25,000 tons of kaolin in white, pink and yellow has been located.

Slate valuable for roofing of slate granule production has been located in shades of red, green and black in Pike county; the amount is estimated at 500,000 tons.

The well known Cinnaobar or quick-silver ore district of northern Pike county is being surveyed and new finds may result.

The importance of conserving the artesian water supply of Pike county and of the present waste of unchecked flow, at maximum capacity are pointed out by Mr. Waggoner. The effect of wanton exhaustion of this valuable water supply is already apparent. Many wells are no longer flowing while others show a marked decrease in flow.

This would indicate that this water supply is not inexhaustible and a plan of conservation would perhaps be of advantage to the residents of the county.

The Mineral Survey of a State WPA Project sponsored by the State Geological Survey under the direction of George C. Branner, State Geologist, Robert C. Beckstrom who completed a similar survey for Oklahoma is State Supervisor; R. E. Vandruff is Technical Supervisor. On the completion of the work, all samples, field sheets and records taken by the men in the field in Pike county will become the property of State Geological Survey. From these, information will be assembled and published in bulletin form by the State Geologist.