

Sharp Co. Independent State Mineral Survey in Sharp County
March 10, 1938

ON March 1, the State Geological Survey as sponsors, with labor furnished by the WPA, opened a state-wide survey, with offices in fifty counties over the State. One such office was opened for Sharp county in the courthouse at Hardy, with S. Hamblin Cole supervising the work.

The purpose of the survey is to locate, measure, estimate, describe, test, and map accessible resources of the State of Arkansas and determine their adaptability for economic use. This is the largest project of the kind that has been attempted in the State, being classed as a "white-collar" project, employing approximately 500 men in the state, the majority of which come in the skilled classification. The work is under the supervision of Mr. Robert S. Beckstrom, state supervisor, 117 North Victory Street, Little Rock, who has just completed a successful survey of this nature in Oklahoma.

At present the workers are undergoing preliminary training in a school conducted in the court house, after which they will immediately start the work in the field. This survey will be a very thorough investigation of all possible mineral deposits. They will have laboratories established in Little Rock and Benton for assays of the various samples that might be located, determining the grade of the deposit and forwarding any report received to the property owner on request for same. All such reports are filed in the office of Dr. George C. Branner, state geologist, for information available to any outside interests, interested in the various minerals and resources of the State, thus inviting outside capital into the State and creating more work and better prosperity for the State of Arkansas.

The project in Sharp county when operating with a full personnel will consist of fifteen men and a typist, as follows:

- Mrs. Orthany Neely, Hardy, typist.
- C. P. Whitney, Poughkeepsie, engineer aide senior.
- Henry C. Street, Evening Shade, engineer aide junior.
- Kenneth S. Spotts, Evening Shade, engineer aide junior.
- Bine Nix, Stuart, engineer aide junior.
- Buford Horn, Hardy, engineer aide junior.
- Marvin Stephens, Williford, engineer aide junior.
- Oather Hall, Hardy, engineer aide junior.
- Enoch A. Boyce, Hardy, timekeeper.
- Ed Shaver, Hardy, truck driver.
- Carl McKnight, Hardy, laborer.
- Ed L. Estes, Hardy, laborer.
- And four men who have not reported to the project yet.

We will greatly appreciate the cooperation of the people of Sharp county, as the more help we receive from you the more thorough our reports can be with the hopes of locating some deposits that will be of great benefit to the people of this section of the State. However we do not wish to cause any false

hopes and will only give out information when the source has been thoroughly tested and analyzed by our Little Rock laboratory of specialists in this work.

If you will have samples of materials that you wish looked at especially we will be very glad to see them and take their location for reference in our work. When our crews are working in that neighborhood we will investigate the deposit and determine the likelihood of creating a paying enterprise, which is the main object of this work.

Mineral Survey Sharp Co. 3-20-38

On March 1st the State Geological Survey as sponsor, and labor furnished by the WPA, opened a state-wide survey with offices in fifty counties in the state. One such office is in Sharp County, in the Hardy court house, with S. Hamblin Cole in supervision of the work.

The purpose of this survey is to locate, measure, estimate, describe, test, and map accessible resources of the state of Arkansas and determine their adaptability for economic use.

This is the largest project of this kind that has been attempted in the state, being classed a white collar project, employing approximately 500 men in the state, the majority of whom come in skilled classification. The work is under the supervision of Robert C. Beckstrom, State Supervisor, 117 N. Victory St., Little Rock, who has just completed a successful survey of Oklahoma.

The workers have been undergoing preliminary training and will start the work at once. This survey will be a very thorough investigation of all possible mineral deposits. They have laboratories in Little Rock and Benton for assays of the various samples of mineral, determining the grade of the deposit and forwarding any report received, to the property owner on request. All such reports are filed in the office of Geo. C Branner, State Geologist, for information for people outside of the various minerals and other resources of the state, thus inviting outside capital into the state.

The project while operating in Sharp county will have a full personnel as follows:

- C. P. Whitney, Engineer Sr. Aide.

H. C. Street, Kenneth Spotts Bine Nix, Buford Horn, Marvin Stephens, and Oather Hall Jr. Engineer Aides.

E. A. Boyce, Timekeeper.
 R. E. Shaver, Truck Driver.
 Carl McKnight, E. C. Estes, Laborers.

Mrs. Orthany Neely, Typist.
 We will greatly appreciate the cooperation of the people of Sharp County, as the more help we have from you, the more thorough our reports can be with the hope of locating some deposits that will be of great benefit to the people of this section of the state.

If you have samples of materials that you wish looked at we will be very glad to see them and take their location for reference, so when our crews are working in that vicinity, we will investigate the deposit and determine the likelihood of developing a paying proposition.

HARDY HILLS SURVEYED Sharp Co. 3-12-38

Mineral Investigations May Prove Valuable to Property Owners

HARDY, Ark., March 15.—A mineral survey of this county sponsored by the State Geological Department was begun this morning. The work is supervised by S. H. Cole, who is directing a corps of 14 WPA field workers. They will locate, measure, estimate, describe, test, and map accessible resources of the county and determine their adaptability for economic use.

The survey will be a thorough investigation of all possible mineral deposits of the county and samples will be assayed at the laboratories in Little Rock and Benton.

Reports of the assays showing the grade of the deposits will be forwarded to the property owners. The corps of field workers consists of E. A. Boyce, timekeeper; E. R. Shaver, truck driver; C. P. Whitney, engineers' aide senior, Buford Horn, Bine Nix, Kenneth E. Spotts, Clay Street, Marvin Stephens, Otho Hall, Roy Atkinson, J. H. Wilks, Doyle Carter, engineer junior aides, Ed L. Estes and Carl McKnight, laborers.

Extensive Deposits Sharp Co. 3-17-38 Zinc Discovered

Evening Shade—An extensive deposit of zinc has been located by the WPA mineral survey crew for this county. C. P. Whitney, mill owner of the Blanville section, is supervisor. The deposit lies along a creek west of Calmine. The vein is said to be about 28 inches wide. The depth and extent of the vein are unknown.

Many years ago an Eastern mining company mined and smelted large quantities of lead and zinc at Calmine. Buildings were erected, and expensive equipment was installed. A "hotel" for lodging the men was put up, and promise was for the growth of a mining "city".

Out of a clear sky word came one day that all operations were to be suspended. The buildings were abandoned and locked up, and the Easterners vanished. Many rumors were in vogue, and are heard even today. Tall tales of counterfeiting, and of the men's being paid in coin hot from the moulds were told. To this day it is not known why the holdings were abandoned.

Extensive Zinc Deposit Found In Sharp County 3-8-38

Special to the Gazette.
 Evening Shade, Aug. 17.—What promises to be an extensive deposit of zinc has been discovered by members of the mineral survey crew of the WPA for Sharp county, the supervisor, C. P. Whitney of the Blanville section reported. The deposit is west of Calamine in the geological stratum which bears the same name and which gives the town its name.

One vein is said to be 28 inches long, two inches thick of an unknown depth. Zinc mines formerly were operated at Calamine, but were closed for no apparent reason 50 years ago. Many rumors were circulated at that time, but no one knew why the expensive equipment for mining and smelting was abandoned. The owners, who live in the East, still pay taxes on the land on which the deposits are found.

Hardy Firm Producing New Home Cleansing Powder, 'Ducky' 2-19-39

Special to the Gazette.
 Hardy, Feb. 18.—Verne Wiley and Jeff Lowe, living near here, have formed the Ducky Products Company and are manufacturing a home cleaning powder, "Ducky," which they have placed on the market this week. The product is made from a clay mined 10 miles northwest of here. The manufacturers claim the deposit will last indefinitely.

Sharp

DEFENSE DISCUSSIONS AROUSE INTEREST IN MANGANESE DEPOSITS

Gazette 11-27-38

By CARUTH S. MOORE.

Evening Shade, Nov. 26.—Every time people begin talking about war—anywhere—people in northeast Arkansas begin wondering about Cushman, center of one of the largest fields of manganese in North America. War means munitions, and munitions require steel. Steel cannot be made without manganese.

Cushman has already suffered varying fortune, directly connected with war and its subsequent demand for manganese, the ugly, dirty-looking substance essential to the making of clean, shining steel.

Nobody knows how many million tons of manganese lie around the little village. It forms entire hills. It crops out where culverts have been laid across the highway. It lines the water courses of the streams thereabouts, and colors their flow. It lies under foot, everywhere, in chunks, mixed with sandstone and limestone, and even in powdered and granulated form.

Manganese Built Town.

Manganese was directly responsible for the development of a lone settler's home into a town. A decade before the Civil war, so the old timers tell you, a man named Henry Newman was bitten by the wanderlust bug, and wandered as far away from his native North Carolina as the site of the present Cushman.

Several more or less logical stories of his dealings with Indians, presumably the Osages, are told. To sum these up, he bought 250 acres of land from the redskins, cut down enough trees from a hillside to build a cabin and in due time, installed the former Miss Betsy Rogers in the cabin as his wife.

A few other settlers drifted in. In 1885 matters had progressed far enough that a one-room schoolhouse was put up. But the next year, 1886, some one noticed the brown stuff that lay about everywhere. Out of curiosity, they sent enough of it away for an assay. "Manganese" was the verdict.

The news spread. An Eastern company leased the territory and began to mine the mineral. Settlers flocked in, and have remained, to work in the mines. This still forms the chief means of livelihood for the people.

The town was named for a Mr. Cushman, president of the mining company. He was instrumental in getting a railroad built in 1887 from Batesville to Cushman.

Boom During World War.

So important did manganese become during the World war that a period of unparalleled prosperity came to the little town. Prices soared sky high. A miner's daily wages trebled those in ordinary times. Landowners sold the mineral rights of their land for thousands of dollars.

But since then manganese prices have dropped, until, at times, little has been mined. The production from the Cushman field has been increasing, however, for the past three or four years. W. H. Denison and son, Reed, are now the largest producers in the field.

From discussions of the nation's defense plans, residents believe things are definitely "looking up" in Cushman. There is much talk among the miners of "the government going to buy up the ore."

Few people know how manganese, which may look like a brown or black chunk rock enters into the making of steel. The substance is put into the molten masses of metal when it is white-hot, for two reasons: One, to absorb the gases which would make "holes" or faults in the finished metal;

and two, to make it ductile. That is, so that it may be shaped into the many articles made from steel and used in our present day lives.

Steel Right Handy Stuff.

Bullets are not the only things made from steel today—not by any matter of means. It has been said that the average American begins his day with a signal from an alarm clock made mainly of steel. He may take a bath or a shower in a bathtub, or under a shower fixture, both made with steel, with water run through steel pipes. Next he dries on a towel woven on steel looms, shaves with a razor of steel, standing before a mirror rolled between steel rollers, and dresses for the day in clothes that were woven on steel looms, and which contain many pieces of steel.

Then, breakfast, cooked, if his wife uses a gas or electric range, on a steel stove. He may eat oranges or drink milk taken from a steel refrigerator. His subsequent meals contain food preserved in steel cans of tin plate.

His automobile, his modern desk chair, the elevator which whisks him up and down to his office, the telephone he talks over, his typewriter, the electric lights through which electricity comes from steel wires, his bedsprings at night, and many other things too numerous to mention, all are made altogether or in part, of steel. For each of these articles there is a special steel, and here manganese enters again.

Methods of Manufacture.

Different methods of manufacture, that is manipulation at different temperatures, with the addition of varying amounts of manganese, result in these special steels. There are three methods of making steel in common use today, namely, the pot-furnace, open-hearth and Bessemer.

To describe these briefly: The first consists of melting the iron, to which carbon, manganese, and other substances are added, in small vessels or "pots." Frequently odds and ends of steel and old iron are melted up by this method, resulting in low grade metals. These are used in articles not requiring the higher grades. Steel so made is often termed "pot steel." It is possible, however, to absorb its impurities by addition of manganese in considerable quantities, and to use it even for the making of tools.

The open-hearth, or Siems-Martin process, gives a very malleable steel. A portion of the iron is oxidized in this process, and this oxide of iron would make the product hard and unworkable, were it not for manganese again. Manganese absorbs the oxygen because it has a greater affinity for it than the iron has.

The Bessemer process is perhaps the best known. This consists of a violent stirring of the molten metal, which is literally torn into spray by mechanical means. By this means the pure steel is separated from the lighter slag and other impurities contained in it. The problem of handling the molten metal, and keeping it molten while subjecting it to as many as 1,500 streams of air, is necessarily difficult. A silicon is used abroad for a lining of the huge, dipper-like cranes which pour it. Manganese is so used here.

New Deposits Discovered by WPA.

One of the most valuable discoveries made by the mineral survey now being conducted in Arkansas by the WPA is that of a new manganese bearing ore that lies near Floral, Independence county. It is undoubtedly a part of the Cushman manganese field. The new find is 16 miles south of Batesville.

The deposit has been estimated at 1,000,000 tons. While much of it is in powdered and decimated form, there is also much chunk manganese-bearing rock. Some of these "chunks" show as high as 54 per cent manganese, it is said by those making the survey.

The survey established the fact that there are large deposits of fine manganese in a distinctive black dirt formation in the county, not hitherto recognized as valuable. Assays of the dirt show 10 to 30 per cent metallic manganese.

In order to mine this type of manganese leaching or electrolytic equipment would have to be installed. No such equipment is used in the Cushman field now, the "chunk" or boulder ore needing no treatment after it is taken from the ground.