

MINERAL SURVEY OF POLK COUNTY WAS BEGUN BY WPA FORCES ON MARCH 1

"Evening Star" Mena, Mar. 2nd, 1938.

Reliable Information of Great Value in Development of Natural Resources May Be Obtained Under Project Under Supervision of Compere Pipkin of Mena.

Reliable information of great value in the development of natural resources in Polk county, is expected to be gained from the mineral survey which started March 1. Polk county is one of the 31 Arkansas counties selected for this important work, which is to be handled as a WPA project, employing 15 men. The Arkansas Geological Survey is sponsoring the project.

Compere Pipkin of Mena will be Polk county's supervisor for this work, which is under the general direction of George C. Branner, state geologist, and R. C. Beckstrom, state supervisor. Supervisor Pipkin recently finished a special course of training in Little Rock in preparation for his important duties. His local office will be in the Jack Drug store building.

A selected crew of 14 WPA workers began Tuesday to take a course of instruction under Supervisor Pipkin in preparation for field work which will start possibly this week.

The purpose of the survey, briefly stated, is to make an inventory of all mineral resources in Polk county that they may be recorded, with definite data concerning each kind located, in the office of the state geologist for free use of the public. This means measurements, estimates, descriptions, tests, maps, a work that is estimated will require possibly two years' time.

It is known that the Ouachita mountain area contains a large variety of minerals. To date slate, road building materials, building stone and brick clay, and perhaps a few minerals, have been practically all of these natural resources that have been used. This new survey proposes to ascertain where these and other minerals may be found in commercial quantities. Many new discoveries may be expected.

In outlining the possibilities of the mineral survey, Supervisor Pipkin gave this explanation:

"Field crews will observe, estimate, measure, identify, map, and describe all the commercial deposits of minerals in the county, including those minerals which may be expected to attract industry to the locality, those which may be used to lower the cost of road and highway construction and public buildings, and those

which may be of importance to national defense. And will so locate them as to show their availability to road and railroad transportation and ready water supply and electric power.

"While this survey does not expect to make spectacular discoveries, such as gold mines, oil wells, large cinnabar deposits, etc., in Polk county, it does expect to locate accurately the minerals which are here, but have not been hitherto developed because their exact location and extent have been unknown, and because a detailed investigation of this has been too costly for a single firm to develop in the face of known deposits already being developed elsewhere.

"It may be possible that this survey will prove the availability and commercial extent of several other minerals, such as novaculite (hone stone), mineral waters, quartz, and others, as well as a greater abundance of those above mentioned. While it is not expected that commercial quantities of the "precious" metals will be found, the survey will welcome definite information of their whereabouts, and will try to investigate thoroughly such information as would appear reasonable.

"The field crew will make only a tentative identification of deposits found. Samples will be sent to the laboratories provided where a complete and thorough analysis of each will be made.

"All wells and springs will be examined if possible. This examination will not include a bacteriological analysis, as this work is outside the pale of this survey, and is being handled by another agency. Many water samples, however, will be exhaustively examined.

"Every person owning land in the county will have an opportunity to lend a hand by giving information to the field crew concerning what he believes to be on his land, and concerning his water supply.

"The survey is particularly interested in wells and springs, as their water give evidence of nearby deposits and the general nature of the sub-strata which may be too deep to be evidenced on or near the surface."

J. R. Riggs, one of the pioneer prospectors in Polk county, was in Mena the first of the week to consult Compere Pipkin, supervisor of the county mineral survey. Mr. Riggs believes he can help locate mineral bodies in the Six-Mile country where he lives, and has prospected many years.

Raising Funds for P.C.P.A. Starts Next Wednesday

Additional Volunteers Were Registered at Meeting Friday Night — Leaders in Move Optimistic

Polk Co. 3-17-38

Next week will see action definitely start in the ranks of the Polk County Publicity Association according to the conclusion reached at the general meeting of the association held Friday night at the courthouse. Wednesday has been selected as the day for raising funds to carry out the advertising program mapped and those who have volunteered to give an hour's work in the campaign will meet at 10 o'clock Wednesday morning at the Chamber of Commerce office where full details of the canvass will be explained and it is hoped the fund will be raised by noon.

A number of additional volunteers had their names listed Friday night to help in the work and although only about 50 attended the meeting, enthusiasm was shown and leaders are optimistic as to results.

Principal speakers of the evening included W. C. Benton, who discussed Rich Mountain and its possibilities as a scenic attraction, C. A. Pipkin, who told of the mineral survey he and his assistants are making of Polk county and explained how the results of such a survey would be of benefit to the county. Others called upon for short talks included Fred Philpot, W. A. Finks, S. J. Ernst, Floyd Olive, Pete McWilliams, J. H. Allen, Dr. Frank Norwood and Anthony Grove.

As at the first mass meeting of the PCPA, the Mena Concert Band again opened the evening assembly with a 30 minute concert which was appreciated. Rev. L. D. Summers, chairman of the association, presided at the gathering.

Mineral Survey Workers Had Big Snake-Killing

Mena Evening Star Polk Co. Sept-1938

Workers on the Polk county Mineral Survey, members of a crew operating under the direction of Supervisor Compere Pipkin, had their biggest snake killing this week in the rugged country southeast of Bard Springs. This working crew killed a total of eight snakes during the day and two of them were rattlers, both diamond backs. One carried 14 rattles and the other 11.

Members on one of the crews of the Polk county Mineral Survey, made an interesting discovery this week that wasn't in their official line. The find was a patch of nice ripe huckleberries which are rare this late in the season. Hugh Gore was one of the party that located the mountain fruit in an isolated spot on the head of Mine creek.

Geological Survey Supervisors Met Thursday

Polk Co. July, 1938

Compere A. Pipkin, local supervisor for the Polk county geological survey, attended a conference of other county supervisors of the state and state directors of the survey, at Hot Springs Thursday. Among those present besides the county supervisors of this area were George C. Branner, state geologist, Robert C. Beckstrom, state project supervisor, Rex C. Branner, district supervisor. Counties represented were Garland, Hot Spring, Saline, Scott, Sebastian and Polk.

The meeting lasted all day. Reports from the various counties were made and a number of interesting points brought out. Under the immediate direction and sponsorship of the state Geological Survey, great progress has been made in the area, including findings of new coal beds in Scott and Sebastian; a new tripoli deposit in Saline; and numerous findings of technical interest in Hot Spring and Garland counties. Location of an unlimited supply of novaculite in Polk county attracted more interest, perhaps, than any other

single item; and location or relocation of sizable quantities of slate, manganese and barite, as well as small amounts of lead, zinc, gold, silver, copper and other metals, reaffirmed the belief of those present that Polk county may be considered the most interesting county in the United States from the geological point of view. Aside from commercial findings, it was brought out that invaluable progress has been made in mapping the underlying formations and structures of the earth's crust throughout the area. This will furnish a geologic picture of the state which will inevitably be of greater future value than any specific deposits found.

Polk County Slate Is Going to a New Market

Polk Co. Sept. 1938

Samples of another variety of Polk county slate that is finding a market in Oklahoma have been left in the office of the Polk County Mineral Survey by Jimmy Sanders, assistant to Supervisor Compere Pipkin. These samples are from the slate quarry of Wm. H. Pate, on Mill Creek, northwest of Big Fork and not far from No. 8 highway, which the veteran prospector visited recently.

The samples are of a variety of slate Jimmy Sanders calls lead grey, and which others might class as blue or green. Slabs of this slate have been bought and moved to Oklahoma City by truck recently where they are cut and polished and used in interior finishing by builders. The slate blocks make fine floors, mantels and baseboards and are attracting more attention than ever because of their beauty and coloring. Two truckloads left Polk county this past week.

Interest in the possibilities of Polk county minerals is the attraction that brought J. A. Werme of Oklahoma City to Mena the first of the week. This young man is interested especially in manganese and other metals that can be used in making steel, and having heard of the Polk county mining field came to look over the local prospects.

Laboratory Is Approved for Testing Minerals

Arkansas Geological Survey Sponsored Project; Plans Are Being Made to Test Waters.

Information has been received from Washington stating that a project for the construction of a laboratory to test and analyze state minerals has been approved by the president. The project is sponsored by the Arkansas Geological Survey. The new building will furnish the Geological Survey with a much needed laboratory to analyze the samples now collected, mapped and classified by the State Mineral Survey. Several thousand samples from sections of the state are now on hand to be tested or analyzed.

The State Mineral Survey is now active in thirty-seven counties, including Polk, covering 37,000 square miles and employing about 700 people. The object of the survey is to locate, map, estimate, sample, and describe each section of land to determine the surface indications of minerals. In many places bore holes are made to determine the depth and extent of deposits which do not appear on the surface. Subsurface cross-sections are being made of some of the districts where clay is the chief natural resource.

Maps are made of each township covered, showing the cultural development which with the mineral and water maps gives detailed information for future development and improvement of any area showing promise.

Plans are now in progress which will make it possible within a few days for the various counties to test the hardness and chlorides of water wells and springs. This information will be compiled in bulletin form and maps will be made showing the results of this survey.

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Polk County Rock Goes to New York

When geologists assemble at the World's Fair in New York City next year, they'll find a Polk county rock on exhibition that is likely to command much attention. This rock was started Friday on a journey that is expected to reach the Arkansas mineral exhibit in the New York show, and then go on to a permanent home in the big city's museum of Natural History.

This Polk county rock that has gone travelling was taken to Little Rock Friday by Compere Pipkin, supervisor of the local mineral survey, who was accompanied by Hugh Gore and Eddie Miller, assistants. It will be left along with old Polk county specimens at the office of State Geologist Branner where the Arkansas exhibit will be made up.

There are few places in the

country where blue and white Slickenside quartz is found, and that makes this Polk county specimen of more than ordinary interest to students of geology. The fragment taken away is about 3/16 of an inch in thickness and is as smooth as glass. It was found on what is known as the Six-Mile fault, in the Bowmar & Crandell shaft, located west of Cove, near the Oklahoma line. The find was made at a depth of about 20 feet below the earth's surface.

According to geological science this specimen of Slickenside quartz must have been in a slide that moved at least 1,000 feet in one of nature's convulsions to attain its smoothness and thinness. There are but few places in the Ouachitas where these slides have occurred.

Annual Roll Call

MENA

Allen Compere Pipkin	Miss Hollin Chambers
Allen Compere Pipkin II	Mrs. Celia Townsend
Michael Bruce Pipkin	Mrs. Bert Ravenscraft
Mrs. Compere Pipkin	

HATFIELD

F. O. Yeakey	Harry Craig
W. T. Rowe	John Hoheimer
J. A. Bruce	Mrs. John Hoheimer
J. H. Daniels	
W. P. Hicks	

Though handicapped in his work because of an eye injury Community Leader F. O. Yeakey has never quit enrolling Red Cross members at Hatfield. He's been delayed, he admits, in getting around, but he's not at all through.

This former soldier and postal worker was in Mena Monday and made a partial report at Red Cross headquarters, turning in names of eight he's enrolled to date.

A family record for a 100 per cent enrollment has won a Red Cross flag for Compere Pipkin, supervisor of the Polk County Mineral Survey. This younger Pipkin family also lays claim to a record made in past years, when Allen Compere Pipkin II became a member of the great humanitarian agency at an age none other has equalled. This branch of one of Polk county's oldest family trees, was enrolled originally when only two weeks of age, which is a record worthwhile.

The Mena Elks had the first of what is expected to be a series of talks by various members of the organization at the regular Monday night meeting when Compere Pipkin gave an illustrated lecture based on geology and minerology, particularly that relative to Polk county and Arkansas. Other speeches will be assigned from time to time to members, with the topics being something relating to their own business or profession.

Until more permanent quarters can be had the Polk County Mineral Survey office will be in the rear of the Pipkin building on De Queen street.

New Tenants in Building Over Lindsay's

Rooms formerly occupied by the University Extension Service commonly referred to as the county agents' offices, over the Lindsay Jewelry store, now have a different class of tenants. The City of Mena in providing quarters for the WPA sewing room, found it had more room than needed for this agency of working women and took on two additional tenants. One is the local police court over which Judge W. I. Greer presides. Another unoccupied room is the new home of the Polk County Mineral Survey. The Farm Security Administration, which happens to be one of the few federal agencies that does ask for rent free quarters, still occupies the rooms it has always had in the rear of the building.

Floyd "Chick" Carter, whose boyhood days were spent in Mena, but who is now a business man at De Queen, where he's lived for years, was a Mena visitor Tuesday. Among other matters attended to while here was to arrange with Compere Pipkin, supervisor of the county mineral survey, to come to De Queen Thursday and make a talk about the work before the De Queen Commercial Club.

Mineral Survey Includes Tests of Arkansas Waters

*Mena Building Star
4/11/37*

The industrial development of a region may be either materially advanced or seriously retarded because of the quantity and quality of surface and ground water supply.

Ground water conditions are influenced by the physical character of the soils and bed rocks. The two provinces into which the State of Arkansas is divided—the highland and lowland sections—are examples of different types of soil and rock formations. In the highland section the water producing horizons consist of sandstones, limestones, dolomites, shales, chert, river bottom gravel, or sand and gravel beds. In the lowland section the water bearing beds consist of silt, clay, sand and gravel, and are usually more productive than are the rocks of the highland area.

The quality of the water available for human use in any locality is of paramount importance to the well-being of its inhabitants, but because water is acceptable for domestic purposes it does not necessarily follow that it is acceptable for certain industrial uses also.

Industrialists of today investigate the water situation of potential locations for their plants. The mineral content of some water prevents its use in the manufacture of certain products because of the chemical reaction of the material to be made up. The quality of the water available is also a factor in the operation of hospitals, sanatoriums, railroads, laundries and dye houses, chemical plants, ceramic industries, to mention a few.

The popular idea that because a spring flows "sparkling cold water" necessarily means that the water is fit for human or industrial use is as erroneous as are many other popular beliefs.

Surface waters are always susceptible to bacterial pollution from surface drainage. The water from shallow wells along or near stream beds in the Coastal Plain of lowland is sometimes rendered unsafe for drinking for this reason.

The WPA Mineral Survey is investigating the water wells and springs of the state as well as its commercial minerals. Samples of water for analysis are taken from all parts of every county in which the survey is being made. In order to make the necessary analysis of minerals and waters and the testing of clays, a laboratory had been constructed in Little Rock at the west end of the old penitentiary in the southwestern part of the city.

In addition to this central laboratory the Mineral Survey is installing field stations in many counties where a partial analysis will be made of county water samples. Tests are made for carbon dioxide, (the excess presence of which causes pipe corrosion), chlorides, iron, and for hardness.

At the present time water testing stations are operating in Jonesboro, Craighead county; Mountain Home, Stone county; Mena, Polk county; Waldron, Scott county; Marshall, Searcy county; Camden, Ouachita county; Danville, Yell county. Other counties have signified their intention of sponsoring testing stations at an early date.

The advantage of sampling the water of wells and springs and of having them tested without delay is that test for carbon dioxide should be made as soon as possible after taking the sample, or within 18 hours.

In the course of sampling the water of wells and springs the county supervisor in charge selects representative water speci-

mens from all parts of his county for further analysis at the Little Rock laboratory where 15 additional tests will be made. These are for total solids, alkalinity, total iron, aluminum, calcium, magnesium, sodium, potassium, manganese, sulphate, phosphate, nitrate, zinc, lead and total hardness.

The cost to the county sponsoring a water testing station is about \$50, covering the cost of equipment and chemicals. The county also provides a location for the plant at some point convenient to the town where the county supervisor has his headquarters. The station is under the direction of the county supervisor, who selects a member of his crew to make the tests, the latter receiving instruction in the standard method of water testing at the laboratory in Little Rock.

The field workers make an accurate record of the exact location of each well and spring from which samples are analyzed. This record is attached to the sample until the analysis is completed, when the record of the result is attached to the field report and filed in the office of the State Geological Survey. This reference matter pertaining to the quality and quantity of the water in the different parts of the state will be a valuable addition to previous compilations on the water wells of Arkansas, the last of which "List of Arkansas Water Wells," was issued by George C. Branner, state geologist, in 1937.

The new information collected will be available to the public and will be of especial value in supplying data to those who intend to use ground water for industrial use.

The state mineral survey is under the direction of Robert C. Beckstrom, state supervisor, with offices at 17 N. Victory street, Little Rock. R. E. Vandruff, technical supervisor, is head of the laboratory in Little Rock; he also superintends the installing of field water testing stations and gives instruction for their operation.

Field Work of Mineral Survey Is Finished

*Mena Building Star
4/15/37*

Water Testing Laboratory
Now in Operation—Visitors
Welcome to See Display in
Lochridge Building.

Field work of the State Mineral Survey in Polk county has been completed. The entire county was mapped so that a permanent record of the geological formations throughout the county will be available from the office of George C. Branner, state geologist, sponsor of the program, when work on the field notes has been completed in the state office of the survey, and the samples collected by the field crew have been analyzed. Meanwhile a water testing laboratory has been established in the Lochridge building at 605½ Mena street, under the direction of Eddie R. Miller, where tests for carbon dioxide, iron, chlorides, and hardness are conducted by Walter Philpot, chemist. Claud Newsom and Fred Willhelm gather water samples and work up the required records and statistics. It is contemplated that this work, together with some additional field mapping of parts of the county, will require the remainder of this year. This important work was made possible in Polk county through the co-operation of County Judge Will Alexander, Mayor Albert Middleton, the Chamber of Commerce, the city council, and the local set-up of the WPA.

The public is cordially invited to visit the laboratory at any time and see the water tests run. The laboratory crew works regularly from Monday through Friday, and will be glad to show visitors who may be interested just what work is being done.

A display of minerals is also kept in the display case in the laboratory at all times, which is changed from time to time. At this time a display of limestones is being shown, including specimens gathered by the survey from Polk, Montgomery and Sevier counties, and from several counties in the north Arkansas lime belt. The display includes also several types of calcite, a specimen of unpolished black marble, a chalk specimen from White Cliffs in Little River county, and fossiliferous ponderosa oyster shells from the marls of southern Sevier county. At least seven additional displays are planned, including metals, common rocks, rare minerals, fossils, Magnet Cove minerals, useful cheap minerals, etc. Announcement of display changes will be made from time to time in this paper.