

NEW OIL COMPANY

Organization at Searcy Plans to Spud in Test Well Soon.

Special to the Gazette. 1922
Searcy, May 7.—A new oil company has been organized in Searcy, and drilling is to begin within a short time near Sidon, 10 miles from Searcy. Eight thousand acres of leases are owned by the company, which filed articles of incorporation Friday with County Clerk G. O. Yingling. The leases were sold in 1904, when a well was drilled at this place to a depth of 1,626 feet, plugged every 50 feet and abandoned. The leases were allowed to forfeit, but were released recently, and will not be delivered until oil is found, and will be forfeited if the drill lies idle as long as 90 days consecutively. Home people are financing the new enterprise, stock having been sold only to the extent of \$10,000. The company is known as the White County Oil Company, and has elected the following officers: J. M. Jones, chairman; J. E. Lightle, secretary-treasurer; F. O. White, J. B. Lightle and J. M. Jones, directors. J. M. Jones is in charge of the drilling. He has had 12 years' experience in oil fields of Louisiana, Kansas and Texas. The drill has been bought in Little Rock and is expected to be shipped within a week.

PLANNING A TEST WELL

Oklahoma Men to Drill Between Little Rock and Hot Springs.

Special to the Gazette. 8-18-21
Bald Knob, Aug. 17.—Gaume & Maxwell of Nowata, Okla., have bought the string of cable tools and equipment used in drilling the test well here by the Bald Knob Construction Company for use in their test well, eight miles northeast of Hot Springs, on the road to Little Rock. Mr. Gaume says other tools being

shipped from El Dorado and Tulsa will be added to the equipment bought here.

Mr. Gaume says his equipment will be sufficient to sink a test well 4,500 feet, but that he expects to strike oil before that depth is reached.

Gaume & Maxwell are drilling a test well at Macedonia in Columbia county.

Soft Shale Reached in Test Well Near Kensett.

Special to the Gazette. 2-16-29
Kensett, Feb. 15.—Work of progressing on drilling the oil test well at Letonia, a few miles north of here on the Missouri and North Arkansas railway by the Letonia Oil Company, and is now down about 1,600 feet. The drill has gone through about 90 feet of soft shale and the drillers are optimistic.

Station Site for Trans-State Gas Line Purchased.

Special to the Gazette. 2-16-29
Kensett, Feb. 15.—Ten acres have been purchased two miles south of here near West Point, and work has started on the construction of a pumping station, to be located there for the natural gas pipe line from Monroe (La.) gas fields to St. Louis. It will represent an expenditure of about \$30,000,000, and about \$2,000,000 of this amount will be spent in Arkansas for labor. The line will serve many towns in Arkansas that are along the line. The gas line is expected to be ready for service in about 18 months.

Gas Line Preliminary Work Is Progressing

Special to the Gazette. 3-11-29
Searcy, March 11.—(Special.)—Work of securing leases for the right of way for the proposed gas line, to be laid from Louisiana to St. Louis, is progressing rapidly. With the exception of a few small gaps, leases have been obtained as far as West Point. Two crews of men are now working in White county, one in the vicinity of West Point and the other in the vicinity of Judsonia.

H. V. Digby, with headquarters at the Hotel Mayfair, is in charge of the lease and right of way department. J. F. Watkins of Searcy, formerly of West Point, is assisting Mr. Digby. The company has bought ten acres of land from Orho Walker at West Point on which to locate a pumping and distributing station, from which nearby towns and communities may be served.

EVIDENCE OF GAS IN WHITE COUNTY

Residents of Letona Section Optimistic Over Prevailing Conditions.

By Ralph A. Hull. (Staff Correspondent of the Gazette.)
Letona, Aug. 24.—In this little village 11 miles northwest of Searcy, drilling crews, working night and day, unostentatiously are giving daily evidence of a belief that a new gas field has been found in Arkansas and that there is a possibility of oil in the same field.

The drillers are sinking a test well for the Letona Syndicate, a wildcat concern with scarcely a dozen men interested in it financially, which already has spent, an audit of its books shows, more than \$100,000 in its Letona experiment and whose trustees believe the well is nearing the point where either gas in large quantities, or oil, will be found.

Gas has been struck, not once, but seven times, according to the log of the well, and the last showing is the one which is providing evidence of a gas field in White county. The gas from the well, most of which has been sealed off from the hole, is being used as boiler fuel for the drilling operation and to provide the heat for the forge on which the tools are dressed.

Gas also is escaping constantly from the top of the hole, and to give credence to the belief that there may be oil somewhere down below, this gas has a strong odor of crude oil.

Test Down 3,408 Feet.
The Letona test at 5 p. m. yesterday when the drill bit was hauled out and a new one substituted, had reached a depth of 3,408 feet, so the drillers said. The writer doesn't doubt it, for it required 15 minutes for a rapidly revolving drum to wind in the cable to which the drilling tool was attached. The hole was baled out, another bit attached and drilling started again.

John McCallion, a member of the firm of Mendallhall & McCallion, who is in charge of the drilling here, said he expected to run into a "big gas sand" at any time, and his partner, A. C. Mendenhall, an independent gas and oil well operator of Chanute, Kan., here on a visit, corroborated him.

The Letona Syndicate was formed in 1925, but because of various delays, one of them due to the death of a trustee of the syndicate, little drilling was done until June, 1928. Since that time drilling, with a standard rig, in the hard rock formation of the Atoka area has been carried on 10 months. Half this time only a single drill crew was employed, but for the last five months drilling has been carried on night and day.

Syndicate Trustees.
Trustees of the syndicate are F. B. Garcelon, secretary-treasurer; L. W. Robertson, president of the Tri-State Telephone and Telegraph Company, also of St. Paul. The only others interested, according to Mr. Garcelon, are men actually engaged in the operation who have been given an interest in the well and the syndicate's holdings which include leases on 15,000 acres in and near Letona. The men include L. D. Hamacher, field superintendent.

The gas sand from which the fuel now is being obtained for drilling operation was struck at 3,036 feet, the log shows, and it was said here today that until it was gotten under control the roaring of the escaping gas could be heard for three miles. To get the gas under control, a 6 5-8-inch casing was set at the bottom of the hole, and that now being used and that which is escaping is forced to seep through water and casing joints before it reaches the top, drillers said. The gas, drillers estimated, would have made 3,000,000 feet a day before it was cased off.

Drilling now is being carried on with a control head at the top of the hole so that, should heavy gas pressure be encountered, it could be cut off at once. Mr. Garcelon, who has made his headquarters in Little Rock for the last year, and his associates here, are making no claims to having discovered a new oil field. They say they hope to find oil, and add that regardless of whether oil is found, or another and more productive gas sand is encountered, development of their acreage will be continued.

May Supply Little Rock.
Mr. Garcelon believes the field should provide gas for industrial fuel in Little Rock, and said that if the syndicate's expectations are realized, a pipeline to Little Rock, some 50 miles long, will be laid with a view to furnishing that city with industrial gas. Natural gas from a White county field, Mr. Garcelon said, could be furnished more cheaply than from the more distant fields now producing, and he surmised that a cheap industrial gas delivered in Little Rock would mean much in the industrial development of the capital city.

The well was started, Mr. Garcelon said, upon the advice of successful geologists. The log of the well, which is painstakingly kept, has borne out the geological reports, except for minor differences, and corresponds, the syndicate's records show, with the logs of producing wells in the Clarksville field which also are in the Atoka formation. Logs of the Clarksville wells were

furnished the syndicate by the Arkansas Gas and Fuel Company under a reciprocal arrangement between the two concerns, and the Empire's chemists have made several analyses for the Letona Syndicate.

In addition to the gas showing, the drill bits have passed through one oil sand, according to the log. The sand was so hard, its analysis showed, that it would not produce oil, but the Empire's geologist who examined it suggested that the same sand, perhaps a few hundred feet away, might be found porous enough to produce oil.

Samples of each change in formation encountered are kept at the well, along with the log, with a view, it was said, to aiding in future drilling operations.

The Letona well is being drilled in the town, although leases are owned on land entirely surrounding it and extending to the top of the dome which is believed to be the center of the immediate gas bearing formation. The well was located on the lower ground, Mr. Garcelon said, rather than at the apex of the formation, because it was feared if gas in considerable quantity were discovered the well would be a volcano instead of a well-behaved gas producer.

Residents of Letona and vicinity accept the well as a producer and the possible new gas field as an established fact, but are not demonstrative. Outside interest has been manifested chiefly by oil and gas companies which have bought up all the leases for several miles around, not already owned by the Letona syndicate. A scout from the El Dorado oil district arrived on the scene three days ago and has been at the well all day each day and part of the nights, since his arrival.

Mr. Garcelon said it is expected that Gas Turned Into New Mains at Searcy.

Special to the Gazette. 12-12-29
Searcy, Dec. 11.—In the presence of officials of the Mississippi River Gas and Fuel Company, Arkansas Power and Light Company, Phoenix Utility Company of Pine Bluff and many townspeople natural gas was turned into the mains of Searcy at noon today by Mayor Mark P. Jones. Searcy is the only city between Monroe, La. and St. Louis, Mo., receiving gas from the big gas line which was laid this summer by the Mississippi River Gas and Fuel Company from Bastrop to St. Louis at a cost of \$30,000,000.

The big main crosses Little Red River east of Searcy at West Point, where a pumping station of 7,000-horsepower capacity has been built. The four-inch main laid between Searcy and West Point is eight and one-half miles long and was laid at a cost of \$60,000 in 10 days time. The four-inch main carries a pressure of 200 pounds, which can be increased to 300 pounds in case of emergency.

Thirty-two miles of piping have been laid in the city by the Phoenix Utility Company at expenditure of approximately \$120,000.

Test of Cosden Oil Company Reaches 1,910 Feet.

Special to the Gazette. 2-23-30
Conway, Feb. 22.—The Cosden Oil Company's test well near Rosebud has reached a depth of 1,910 feet. Practically all the drilling was in hard, sandy shale. Slow progress is being made in the same company's well at Hector, Pope county, where only 25 feet has been drilled in five days, to a depth of 2,525 feet.

Much Interest Shown in Well Near Searcy.

Special to the Gazette. 11-21-31
Searcy, Nov. 20.—Several natural gas and oil operators from Tulsa, Okla., and Tyler, Tex., have been looking over the Letona gas well and country around the well in the past several days. They are favorably impressed with possibilities of oil in this territory. The Letona well is 3,600 feet deep. Nine gas sands have been drilled through without encountering moisture in any of them. Several million feet of gas has been cased off, drillers said, and a flow is now coming from the bottom.

DISCUSSES GEOLOGY OF WHITE COUNTY

Gazette 3-27-21

Structure Is Decidedly Favorable for Oil, Says Little Rock Man.

Special to the Gazette. 3-27-21
That every geological indication in the White county field is favorable for oil is the statement of H. H. Johnson of Little Rock. Mr. Johnson, an attorney, who specializes in oil matter, formerly was attorney for the Ohio Cities Company, with headquarters in Cleveland. In connection with his legal work he has made a careful study of geology and is said to be considerable of an authority on that subject.

In discussing the geological formation in White county, Mr. Johnson says:

"It seems a singular fact that that part of White county destined to produce untold wealth to the state and to build up cities and fortunes, has escaped the notice of the geologists almost entirely.

"This in the face of the fact that the value of refined petroleum in the United States in 1921 exceeded the value of any of the metals except iron, which it approximately equaled, and was greater than the combined value of gold, silver, copper, lead and zinc. The only natural mineral product exceeding it in value is coal. The value of the production from the Mid-Continent field, consisting of Kansas and Oklahoma, in the year 1917, was approximately \$250,000,000.

"This is sufficient to show the tremendous advantages that Little Rock and the near-by cities will derive from the development of the White county oil field. And yet, every geologic condition points to this wonderful possibility. The following summarizes the geologic conditions under which petroleum and natural gas must occur.

Geological Conditions.

"The preponderance of authority points to the theory that the greater part of petroleum has been produced from marine and vegetable matter undergoing decomposition in contact with salt water, followed by the segregation and accumulation in previous rocks of the oil produced. There is no relation of the occurrence of petroleum to volcanic or igneous action or to such ores as copper, zinc, silver or gold. The most productive areas for oil in great quantities are where the strata are comparatively undisturbed. A folded or dome or terrace structure often favors the accumulation of oil and gas in the domes or anticlines and sometimes in the superimposed structure on these anticlines, where conditions are otherwise favorable. Important requisites for a productive oil or gas field are an impervious cap rock and a porous reservoir. Salt water almost universally accompanies oil and gas in the same sand. This impervious rock is made from the calcareous matter derived from marine deposits.

Petroleum is composed of carbon and hydrogen in chemical combination known as hydro-carbons. In conjunction with the carbon and hydrogen there frequently is oxygen, nitrogen and sulphur in much smaller amounts. In crude oils the amount of carbon varies from 80 to 89 per cent, the hydrogen from 10 per cent to 15 per cent, oxygen from none to five per cent, nitrogen from none to 1.8 per cent and the sulphur from .01 per cent to five per cent.

"Now, interpreting this summary to the facts as known in White county: We have a catchment area for the collection of an immense pool of oil. There is the Fourche mountain granite inclosing one side and the resultant faulting at Augusta and DeVall's Bluff on White river, inclosing the other three sides. The total displacement or throw of this faulting seems to be a continuation of about 626 to 700 feet, with the down throw to the north, as shown by the log of the well on the McClintic farm, south of DeVall's Bluff, this faulting and inclosure hermetically sealing this whole area and preventing the escapement of petroleum therefrom.

Was Once Part of Sea.

"It is conceded by all geologists that the low-lying area in southern White county was once a part of a great Mediterranean sea, which connected the Gulf of Mexico to the southwest of White county, but during the latter part of the cretaceous, the movement was reversed and the western region was gradually elevated as the area near the Mississippi was depressed. This resulted in severing the connection between the gulf and

this interior sea. It was therefore in this area that the salt waters lingered the longest before they gradually subsided and passed into the Gulf of Mexico, thus fulfilling all the requirements for the manufacture of the calcareous matter for the impervious

rocks to contain and the marine and vegetable matter in conjunction with salt water to produce petroleum. The necessary pervious reservoir for the accumulation for petroleum was thus formed.

"The necessary pervious reservoir usually consists of a loose sand though it may be a coarse gravel or a disrupted shale or limestone. It is merely necessary that the rock should contain a considerable amount of voids. The ordinary sand will have from 15 to 35 per cent of voids and the amount of oil contained and the ease with which it is discharged into a well may vary greatly. Porus sand or gravel and heavy gas pressure are conducive to rapid expulsion of oil. Fine sand and low pressure gives steady producing wells of great longevity. The ultimate production of a well would therefore be determined by the depth and extent of the sand, the physical character of the sand, the physical character of the oil and the pressure.

Three Elements Together.

"In every sand, there occurs together, gas, oil, and salt water. The gas invariably occupies the uppermost portion of the sand, the salt water the bottom, with the oil intermediate. The sand usually lies at the same angle or dip as the stratum in which it is contained, so that this fact forms the basis to a great extent of the geologist's work.

"The water horizon in about the same stratigraphic position as the Cockfield horizon in all this area is affected more or less by the impoitable sulphur water encountered at this horizon. There are many 'mineral' springs and wells. Some contain a very great amount of hydro-carbon and mineral matter in solution and must be used with great caution. And this is especially true in proximity to favorable structures. This data relates to geochemistry and can be confirmed by any governmental report pertaining to this subject.

"All of these facts are strongly corroborative of the faith of the men now engaged in developing this field. The people owe the duty of encouragement to every legitimate enterprise, and the state the duty of protection against the diminution of the gas pressure, the hazard of offset wells, the flooding by salt water from beneath, flooding by water from upper strata, by careless operators and the duty of protection from the exploitation of the ignorant from dishonest promoters."

