

to determine the presence of petroleum, gas, cement materials, ceramic shales, structural materials, and many other minerals. The more important investigations were conducted during the summer by the field party.

THE SWITZERLAND COUNTY AREA

The primary reason for the work done in Switzerland and neighboring counties has been the determination of structural features which might be favorable to the accumulation of natural gas. The fact that gas had been found in several test wells near Vevay, indicated that the structure of this section had not been completely worked out.

A careful study of the strata of a portion of the county was undertaken. Fossils were collected from each stratigraphical horizon and as many of these as possible were identified in the field, but the collections were brought to the laboratory for further study and identification. The formations studied included the following from the Upper Ordovician divisions: Elkhorn, Whitewater, Saluda, Liberty, Waynesville, Arnheim, Mount Auburn, Corryville, Bellevue, Fairmount, and Mount Hope. Drillings from other formations as low as the Shakopee limestone were obtained from several of the wells and examined.

In order to definitely map the structural conditions, it was necessary to determine accurately the position of the various strata by using the telescopic alidade. Because many of the outcrops on which elevations were obtained were in relatively inaccessible areas, it was sometimes necessary to remove underbrush before the instrument could be used. Several key horizons were used and the data was transferred to a map drawn to the scale of an inch to a mile. Results of the work indicate the possibility of finding other suitable structures in this area, which might be worthy of testing for commercial accumulations of gas.

The more detailed examinations were made in Craig township, but additional work was done in Jefferson, York, Cotton, Pleasant, and Posey townships, and in local sections of Jefferson, Ripley, and Ohio counties. Many citizens requested assistance in local problems.

Several thin layers of the Ordovician limestones were found to be composed almost entirely of one fossil species. In order to determine whether these limestones were of special value as fertilizers because of their phosphoric acid content, extensive collections were made of the four more abundant types. These collections are being tested in the chemical laboratory to determine whether it will pay the farmers to collect the limestone in which these fossils are abundant and have them crushed for fertilizer purposes. A series of the type fossils collected during the summer will be identified and labeled for deposit in the State Museum. These are representative of all the geological horizons exposed in Switzerland County, with additional specimens from the Silurian and Ordovician formations in Ohio and Ripley counties.

After completing the work in Switzerland County, the field party resumed the investigations commenced during the previous year in the Cataract and Cunot areas of Owen County. In order to determine the structural conditions of the areas in which the geological work had already been completed, elevations of the key horizons were determined for various localities by using the plane table and telescopic alidade.

THE UNIONVILLE AREA

The field of a faulted area extending from the northern part of Monroe County into Morgan County was studied in an attempt to map accurately the resulting structural conditions.

The Mount Carmel fault extends in a northerly direction along the eastern boundary of Monroe County and a minor fault has been found which extends in a northwesterly direction from the Unionville gas field to and perhaps beyond the southern boundary of Morgan County. The influence of this minor fault on the possible accumulation of petroleum or natural gas outside the present producing field is not known, since no wells have been drilled in the proper position along this minor fault line.

Within the Unionville pool the wells already drilled have shown a total open flow production of more than 9,000,000 cubic feet of gas. The amount of throw and other features of the minor fault are not known, since there have been no wells drilled which might reveal the sub-surface stratigraphic conditions. A section of the area which might have been disturbed by the minor fault lies within the Morgan-Monroe State Forest, but there is slight chance of the production of oil or gas in case the producing field is extended northward. The rocks exposed at the surface belong to the Harrodsburg and Upper Borden formations, and the gas production has come from the Devonian limestone at depths ranging from 600 to 700 feet.

THE THIRD INTERNATIONAL COAL CONFERENCE

The division head attended the third international conference on bituminous coal in the Carnegie Institute of Technology at Pittsburgh, November 16 to 21, 1931. More than a thousand delegates were present from the coal producing states and from many foreign countries.

All phases of production, treatment, and uses of coal were considered in the many papers presented. German experiments in the use of powdered coal as motor fuel and in the pipe line transportation of such coal dust were described. A number of methods of high temperature and low temperature carbonization of coal were discussed. Solutions of the various problems of the production and marketing of the by-products of coal were discussed. A Belgian scientist dealt with the liquefaction of coal by dispersion in a liquid medium, using both heat and solvents. In this connection the effect of catalysts in the hydrogenation of coal was studied.

Experiments conducted by the experiment stations of the United States Bureau of Mines in the manufacture of coke were described.

A number of papers were concerned with the history of coal, most of them dealing with the divergent views of the origin of the coal beds. The production and use of coal gas, coal tar, and their many by-products were also discussed.

An important result of the conference was the discussion of various suggestions for relieving the depressed condition of the coal industry. Fifty-one separate improvements were suggested. Attention was focused on the industries of Pittsburgh and their relations to the coal industry

in western Pennsylvania. These relationships directly and indirectly affected the production and use of many other raw materials.

The meetings were very instructive and will likely have some affect on the coal industry as a whole.

SPECIAL FIELD AND LABORATORY INVESTIGATIONS

Type of Investigation	Individuals Served
Building stone survey.....	Fairfax Stone Company
Sand tests	Morgan, Knox, Greene county residents
Location of test well.....	Speed Company
Road limestone deposits.....	Citizens of Paragon
Article on oil fields of Indiana.....	Sidney Powers, Tulsa
Lower block coal.....	Mr. Martz, Carmel
Water supplies	Mr. Eastwood, Newark, N. J.
Underground water conditions.....	Mr. Snyder, Fort Wayne
Natural gas	Mr. Downey, Dillsboro
Natural gas structures.....	Mr. Wrege, New Albany
Examination clay, shales, sand outcrops.....	Mr. Hodson, Greene County
Examination of geological formations.....	Dr. Bakes and Mr. Howlett, Versailles
Foundry sand investigation.....	Land owners in Morgan County
Water well drillings.....	Messrs. Moore and Petri, Rushville
Analysis of lead, zinc and copper ore.....	Mr. Cutland, Terre Haute
Chert, iron ores, limestone galena samples.....	Mr. Shellinger, Bloomfield
Sandstone samples	Mr. Knowles, Vincennes
Identification of fossils.....	Mr. Baglan, Madison
Examination of quartz rock.....	Mr. Lampkin, Tell City
Samples of mica.....	Miss Long
Clay examination	Mr. Thielke, Marion
Drilling samples	Louisville Cement Company
Drilling samples	Shrock and others
Examination of Coal VIII.....	Mr. Book, Sullivan
Porter County ground water supplies.....	W. Phillips, Chesterton
Report on building materials.....	U. S. Dept. of Commerce
Occurrence of natural gas.....	Mr. Branigar, Chicago
Report on mineral wool.....	A. I. M. M. E., Washington, D. C.
Report on Indiana coal.....	Keystone Coal Catalog and Directory
Ground water in northwestern Indiana.....	M. R. White, Chicago
Lake Cicott foundry sands.....	Great Lakes Foundry Sand Co., Detroit
Distribution and occurrence of natural gas....	Mr. H. Ley, Tulsa, Okla.
Examination of foundry sands.....	Mr. Ware, Evansville
Foundry sand deposits.....	N. Yates, Decker
Location of a test well.....	Mr. Haven, Elberfeld
Building stone surveys.....	Mr. Dobson, Bedford
Dam and reservoir site examined.....	Indianapolis Water Co.
Field investigations	Citizens, Jefferson and Switzerland counties
Manufacture of mineral wool.....	C. B. Southwick, Manville, N. J.
Examination of antimony ore.....	M. Mumau, Indianapolis
Inspection of oil and gas wells.....	Mr. Brown, Deputy, Loogootee
Examination of sandstone deposit.....	Road contractor, Brown County
Determination of minerals.....	Mrs. E. Brown, Cloverdale
Well drillings	Kosana Oil Company, New Paris
Clay deposit examined.....	Mr. Walton, Campbellsburg
Marcasite and pyrite samples.....	Mr. Travers, Frankfort
Devonian shale sample.....	Mr. Coekran, Edinburg
Report on magnesite deposits.....	Mr. Cheney, Michigan
Vanderburgh County coal measures.....	V. Smith, Golconda, Illinois
Oil fields of Indiana.....	Mr. Haseman, Linton
Well drillings	Howard Shields, Laconia
Minerals from Orange County.....	Agricultural Agent
Nitrates from Texas examined.....	R. Lanthrum, Chicago
Drilling samples	Mr. Hollingsworth, LaPorte
Manufacture of mineral wool.....	Mr. Baylor, Speeds

PUBLICATIONS

Early in the fiscal year the Division of Geology completed publication No. 108, "The Sub-Surface Strata of Indiana," a revision of publication No. 55. It includes mainly the well records that have been received since 1919, but much additional material is found in the later report and it is proving very helpful to the persons interested in the oil and gas industry, as well as many others.

Much field and laboratory work was required to complete the "Geological Map of Indiana" which was printed as publication No. 112. Many corrections in the geology and culture of the map were necessary after the original draft was completed.

Several shorter reports were issued by the head of the division, including an article for the Keystone Coal Buyers Catalog and Directory on Indiana coals. A report on the geological conditions associated with the occurrence of natural gas in Indiana was written for Mr. Henry Ley of Tulsa, Oklahoma. An article on the typical oil fields of Indiana was prepared for publication at the request of Mr. Sidney Powers of Tulsa.

The results of the field investigations in Switzerland County were made available on a large scale map of the county, blue print copies of which were sold at cost.

The head of the division presented a paper before the Indiana Academy of Science dealing with the structural conditions in the Siosi oil field. A supply of separates from this paper have been purchased for the office, and they will be available at cost.

MINERAL AND ROCK DETERMINATIONS

Students, collectors, well drillers, and other interested citizens have sent to the office and laboratory the many specimens listed in the table below. Analyses were furnished for many of the rocks and minerals identified, and in some instances reports were given on the possible commercial value of mineral deposits. The fossils were identified as definitely as possible. The large number of drilling samples came as a result of requests by members of the division, and represented well records for several wildcat areas in the state.

Well drillings	1,786	Chert	12
Fossils	839	Selenite	10
Mica	75	Gold	9
Sandstone	75	Water	9
Miscellaneous	60	Oil	8
Limestone	53	Bryozoa	7
Quartz	51	Galena	6
Pyrite	37	Igneous rocks	6
Clays	34	Peat	6
Shale	26	Trilobites	4
Marcasite	25	Antimony ore	3
Feldspar	24	Bornite	3
Calcite	21	Carbon	3
Rocks	21	Chalcopyrite	3
Coral	20	Granite	3
Limonite	14	Schist	3
Hematite	13	Arrow Points	2

Barite	2	Gypsum	1
Crinoid	2	Inoceramus	1
Fluorite	2	Magnesite	1
Gas	2	Malachite	1
Silt stones	2	Marl	1
Ankerite	1	Shark tooth	1
Baculites	1	Stalactite	1
Copper	1		
Cuprite	1	Total	3.302

MINERAL PRODUCTION IN INDIANA

In 1930, the last year for which complete statistics are available, Indiana ranked fourteenth among the states of the Union in the total value of minerals produced. The total of over seventy-five million dollars does not include the value of the pig iron, coke, and petroleum products manufactured within the state from raw minerals. Indiana ranked fourth, sixth, and fourth, respectively, in their production, and their combined value was over one hundred million dollars more.

In the order of their value, the principal mineral products of the state are coal, stone, cement, and clay products. The following table has been taken from the summary of the mineral resources of the United States for 1931, compiled and published by the U. S. Bureau of Mines:

PRODUCT	1930	
	Quantity	Value
Cement..... barrels	(1)	(1)
Clay products.....		(2) \$12,032,852
Clay, raw..... short tons	253,795	(3) 216,098
Coal..... short tons	16,489,962	26,178,000
Coke..... short tons	4,984,620	(3) 12,166,488
Iron, pig..... long tons	3,195,517	(3) 52,869,137
Lime..... short tons	87,965	600,784
Mineral paints, zinc and lead pigments.....	(1, 3)	(1, 3)
Mineral waters.....	(4)	(4)
Natural gas..... M cubic feet	1,217,000	676,000
Natural gasoline..... gallons	2,000	(1)
Peat..... short tons	(4)	(4)
Petroleum..... barrels	994,000	1,610,000
Rubbing stones and whetstones..... short tons	(1)	(1)
Sand and gravel..... short tons	9,838,757	4,667,771
Sand-lime brick..... thousands	(1, 2)	(1, 2)
Stone..... short tons	4,541,220	19,285,709
Sulphuric acid (5)..... short tons	(1, 3)	(1, 3)
Miscellaneous (6).....		15,986,721
Total value, eliminating duplications.....		\$79,226,808

(1) Value included under "Miscellaneous".

(2) Figures obtained through co-operation with Bureau of Census.

(3) Value not included in total value for State.

(4) No canvass.

(5) From zinc smelting.

(6) Includes minerals indicated by "1" above.

OFFICE WORK

The office force of the division has been largely engaged with routine work, answering correspondence, receiving callers at the office, preparing maps, and tabulating geological information. Typed copies of well records are made as soon as they are received at the office.

Proof reading was completed for Publication No. 108, "The Sub-Surface Strata of Indiana," and the finished reports were received early in January. Exchange copies were mailed, and many other copies were sold as the result of notices in newspapers and various other agencies.

The contract for the large geological map of Indiana was let to the Stafford Engraving Company. It was necessary first to draft a new base, this being taken from the old map published in 1903. Proofs were taken from the tracing at various stages, and many corrections were made in the drainage, railroads, and geological boundaries. A stratigraphic column was drawn to scale. Several proofs were colored accurately, to be used in the completion of the color plates. The plates were made and the printing completed by the end of the fiscal year.

Several short reports were written at the request of individuals. An account of the physiography of Knox County was sent to a newspaper writer. Other newspaper articles describing the work of the division were released at intervals. A summary of the oil and gas drilling operations in Indiana for 1931 was furnished for incorporation in the annual report of the Petroleum Division of the American Institute of Mining and Metallurgical Engineers. A shorter summary was compiled for the editor of the Oil Weekly. Short articles were written for several issues of the Journal of the American Association of State Geologists.

Our stock of available publications has been continually augmented until we now have for sale or free distribution over 200 separate reports and maps, in addition to the typed copies of nearly 2,000 well records. Extra separates of the more important papers presented before the geological division of the Indiana Academy of Science have been purchased from the authors in order to make them available for general distribution, and these will be sold at cost. Much of the free pamphlet material goes to students in all parts of the country.

Several small county oil maps have been constructed, in addition to the oil field maps of smaller areas which were already on sale. In March, when the office of the division was moved to its new quarters, parts of the library were recataloged, and a good part of the stock of sale publications was boxed up and moved to storerooms.

A report was written on the geological history of Laporte County for use in a celebration there. Two other state governments received advice on the enforcement of oil and gas conservation laws in Indiana. Many persons were given information on the geography of all or parts of Indiana. Correlations of coal seams, lists of coal operators, and coal analyses were requested frequently. Many land owners were informed of the chances of finding coal deposits. Oil refinery statistics were also given out.

With the assistance of well records in the office files, a structure map was constructed for a new oil pool in Gibson County, and a location made for a new well. A report on the gas reserves of Decatur County was given to a company holding acreage there. Various out-of-state companies were advised of the quantity and quality of kaolin available for development.

The file of information on underground water resources has been used in helping many persons locate and utilize supplies of potable water. The Indiana Nature Study Club has been assisted in finding and identifying fossil and rock specimens. References to paleontological and stratigraphical studies have been supplied to students and others. Many individuals have been assisted in finding suitable specimens for their rock gardens. Sandstones outcropping on the Brown County State Park were examined, and a report made on their qualifications for use as building stone.

A summary of the office work follows:

Letters received	2,318
Packages received	960
Letters mailed	6,879
Packages mailed	1,461
Reports distributed	2,172
Annual and other reports.....	1,215
Sub-Surface Strata of Indiana.....	332
Borden (Knobstone) Rocks of Southern Indiana.....	321
Maps	125
Well logs	58
Insoluble Residue Studies of the Mississippian Limestones in Indiana.....	35
County maps	32
Handbook of Indiana Geology.....	32
Geology of the Silurian Rocks of Northern Indiana.....	10
Geological Conditions in the Oil Fields of Southwestern Indiana.....	5
Geology of the Deep Wells.....	3
Geological History of the Vertebrates.....	2
Part I of the Handbook of Indiana Geology.....	1
Part V of the Handbook of Indiana Geology.....	1
Oral Reports	1,875

STATE MUSEUM

The Indiana State Museum has continued progress during the year, in additional equipment and in many acquired articles for the exhibit. Large wall cases and an additional floor case have been purchased, making it possible to increase the museum interest greatly.

In three wall cases we have placed a loan of the Captain C. S. Tarlton exhibit. This exhibit of knives and spears shown probably comprises the largest private collection in the United States.

The floor case contains the Sullivan Memorial collection presented by Mrs. Algernon Sydney Sullivan and George H. Sullivan of New York City.

A noted collection of guns, revolvers and pistols from the Ernst von Ehrenstein estate of Rochester, Indiana, was purchased and placed in a wall case.

During the year a card index of the Museum has been made. This system was completed after a study of the Field Museum indexing system at Chicago.

The attendance during the year has been greater than last year. Although more space and equipment are needed, the year has been noted for distinct progress and the public has taken greater interest because of the added exhibits.

DONATIONS

Seth Thomas clock 80 years old. Presented by Mrs. Chas. Volp, 941 Bradbury Ave., Indianapolis.

Piece of sheet mica found on the breast of an Indian skeleton, unearched from a mound 3 miles north of Seymour. Donated by Chas. Pauley, R. F. D. 1, Seymour, Indiana. Secured through the courtesy of George Berg.

Thirty-nine brachiopods from the Sauers farm near Madison, Indiana, and donated by Fred Sauers.

Cigarette lighter from World War; bracelet worn by donor's grandmother; book of prayer, small volume; 3 souvenir coins; 1 Chinese coin; 1 Centavo Philippine; 2 beer checks, pebble from Ontario. Loaned by James Drane, Indianapolis.

100,000 German marks, donated by James Drane, Indianapolis.

Jade tiger from Peking, China; copper tiger from India; Mandarin tobacco box from China; carved bird from Japan; inlaid box from Japan; carved snake from Bangkok, Siam; Philippine bolo; 2 Navajo Indian baskets; Moro shield from Philippines; 25 pieces of Satsuma china; candle holder and loving cup from Vienna, Austria; Philippine flag, captured at the battle of Santiago, January 21, 1900; Philippine patata; 3 vase stands; 6 elephants of ebony—2 other black; 3 bisque elephants—6 other white; 3 steins; silver cloisonne pipe from Peking, China; 4 pieces of brass from Japan; piece of Russian brass; pair bronze vases from Cochinchina, China; bronze vase from Peking, China; pair bronze statues from Italy; bronze urn from Japan; 2 pieces pottery from Austria; hammered brass bowl from Jaffa; 5 hats from China; 2 Philippine hats; brass chocolate pot from Algiers; copper chocolate pot from Morocco; Japanese vase; Japanese porcelain vase; pair Chinese porcelain vases; Turkish vase; pair Mexican vases; basket covered vase from Japan; Austrian teapot; 2 cloisonne vases; 7 monks piece from Seville, Spain; 4 pieces Nippon China; 1 Golden Eagle; water buffalo—caribou horns; pair elk horns, Royal elk; pair ibex horns; small caribou horns; deer horns; goat head, Catalina Island; goat head from Himalaya Mountains; mule deer head, north of Denver, Colorado; antelope horns from Africa; pair Chinese dragons from Peking, China. All of the above were loaned by Capt. C. S. Tarlton, Indianapolis.

Mill stone brought to Henry County from Virginia by Hugh McLarg about 1830; brace brought from South Carolina about 1825 by Aaron Fleener; cooper's adz brought from North Carolina about 1810 by Neal McCoy; reap hook brought from Virginia in 1830 by Hugh McLarg; bullet mold made by Wm. Gould for Hugh McLarg; bullet mold carried in Civil War by John Fleener; gun charger made from deer's horn by Hugh McLarg; sea fan and sea coral from Hollywood Beach, California. Presented by Mr. and Mrs. S. A. Fleener, 1910 Sheffield Avenue, Indianapolis.

Skein of flax, flax and two night caps used by donor's grandmother, Ruth, Faulkner, near Muncie. Presented by Fielden Puckett, 1916 Aster Place, Indianapolis.

British defensive hand grenade; American offensive and defensive hand grenades from World War. Donated by John L. Niese, Indianapolis.

Pennsylvania R. R. poster of 1857, loaned by Clarence Malick, Elwood, Indiana.

English penny and Chinese coin, loaned by Mr. Drane, Indianapolis.

Fossil coral found in field near McCordsville, donated by Mr. Jolly, R. F. D., McCordsville, Indiana.

Gavel and candle sticks, made from apple tree planted by General Harrison, near Harrison Springs. Presented to Mr. Best, of Corydon, by Mrs. Kate Stephens, R. F. D., Corydon, and by Mr. Best to Ralph Wilcox, State Forester, who presented it to the museum.

Copy of Frank Leslie's Illustrated Weekly for October 23, 1869, presented by Thomas Brown, 714 South West Street, Indianapolis.

Inoceramus, galena and barite; fossilized wood, bornite and malachite—copper ores; galena; coral; chalcopryrite; malachite; gold ore; crinoid stems; scaphites; brachiopod; cannel coal; gypsum; stalactite; fossil wood—agate; quartz containing copper ores; schist and native gold; galena and pyrite; pyrite and quartz. Donated by Ray Fiddler, steam shovel operator, Needles, Nevada.

Collection of guns, pistols, and revolvers, numbering 51, purchased from the Ernst von Ehrenstein estate at Rochester, Indiana, by the museum. A complete list is filed in the catalog.

Piece of meteor from Meteor Crater, between Flagstaff and Winslow, Arizona. Purchased by the museum.

Two cut glass decanters; six champagne glasses; six claret glasses; four sherry glasses; one liquor glass; two champagne glasses, decorated; four champagne glasses, decorated; three champagne glasses, undecorated; one old French clock; one bronze medallion of Judge Sullivan. Donated by Mrs. Algernon Sydney Sullivan and George H. Sullivan of New York City.

Roll of the first company of the 84th Regt., Indiana Militia, 1837; commission of Benjamin Hicks as captain of the 84th Ind. Militia, first company, 1837. Donated by Inglewood California Post No. 188 of the American Legion.

Memorial badge worn by Heaton at Philadelphia July 21, 1834. Presented by Fred Jones, Indianapolis.

Opal from Australia. Given by A. W. Mackenzie, Indianapolis.

Quilt containing over 50 signed blocks by Indianapolis women, in 1844. Presented to the wife of the M. E. Pastor. Purchased for \$50.

Several specimens of *Orthis* (*Dinorthis*) *deflecta* Conrad, from the Plattville limestone (Ordovician) at Minneapolis, Minn. Donated by F. W. Sardeson, Minneapolis.

Specimens of *Pinna* fossil, from Brown County, donated by Denzil Doggett, Indianapolis.

Granite breccia from Pokagon State Park. Donated by Theodore Kingsbury, Indianapolis.

Specimen of fossilized cedar from the Arizona petrified forest, purchased by the Museum for \$5.00.

Corn stalk from field planted in 1876; was under a house built in that year. Donated by E. H. Lee, Fairland, Indiana.

Civil War (U. S.) belt buckle of donor's grandfather. Donated by Ed Horn, Indianapolis.

The following articles were in the home of Judge and Mrs. Jeremiah Sullivan, of Madison, Indiana, and were presented by Mrs. Algernon Sydney Sullivan and Mr. George H. Sullivan of New York City: Three dinner plates, maiden hair fern pattern about 1870; dinner plate, delicate vine and leaf design—Ridgeway's Ideal Semi-Porcelain, Osborne England, about 1870; two dinner plates, blue roses, white border, English Semi-Porcelain, about 1870; glass wine decanter with glass stopper, delicate stars on bowl; blue china vegetable dish and cover, circular shape, handles restored, about 1875; American glass sauce pitcher, 3 mould. late 19th century, 5 inches high, moulded decorations; old English Toby ale mug or pitcher, colored, 10½ inches tall, genuine Staffordshire; rare antique Persian table cover, early 19th century; seven and one-half yards Russian or Persian shawl border, all colors are in it; four and one-half yards Scandinavian, white and red, hand made lace; old fashioned lady's hand bag, black, beaded; old fashioned lady's opera glass bag, about 1870; black circular box for lady's dressing table, surmounted by small, cream colored cupid; silver plated butter dish, about 1865-70.

Book, "A System of School Geography," chiefly derived from Malte-Brun; by S. Griswold Goodrich, 1835. 11th edition; piece of cable which crosses the Ohio River at Madison, Indiana. Presented by Major David I. McCormick, Indianapolis.

Collection presented by Newton Lunsford, R. R., Fortville, son of Martin Lunsford: Slate purchased in Wilkes County, N. C., in 1785, by Jonathan Lunsford; silk handkerchief worn about the neck 130 years ago by Mrs. Jones; pocket knife bought at Fortville 74 years ago by Martin Lunsford; husking peg made by Martin Lunsford; shell from the well at Jerusalem, where Christ met Mary, secured 50 years ago; ring carved from a wood knot, in camp during the Civil War, by Martin Lunsford; winding wheel made by Martin Lunsford.

Fossil cone given to donor by Mrs. Case, and donated by James Moiser, Indianapolis.

A widow's mite, bronze coin of John Hyrcarnes, B. C. 135 to 106. Obverse in archaic Hebrew characters "Johannan the High Priest of the Heber of the Jews". Reverse: A double corona copiac with frappy head between. Presented by Charles J. Lynn through the courtesy of Eli Lilly.

Rifle of Jacob Bombarger donated by Mrs. Jacob Bombarger, Richmond, Ind. Rifle is Wesson's patent 1862. Cincinnati.

Muskellunge, Ojibwa *mashkinonje*, caught in Wisconsin by Dr. Eugene Buehler. Tackle still in fish's mouth. Speckled trout, carved pig, seven birds. Donated by Dr. Buehler's parents, Mr. and Mrs. Max Buehler, Indianapolis.

Pair wooden candle sticks made from Constitution Elm at Corydon. Presented by the citizens of Corydon.

- Gary medal 1906-1931, 25th anniversary. Presented by the State Library, Indiana section.
- Sword carried in Civil War by Nelson Hendrix, Co. F., 16th Ind. Vol. Inf. Presented by Mr. and Mrs. Homer E. Hendricks, Indianapolis.
- Old watch made by George Thomas, Kilmarnock, Scotland. Carried by James Lynn, grandfather of donor, C. R. Stewart, Indianapolis.
- Freak hen's egg. Donated by Frank E. Sheaffer, Indianapolis.
- Collection of Phillipine knives, loaned by Major Wm. E. Dorman: 1 kreese, 1 barong, 1 bolo, 1 campalon, 1 spear, 2 canes, piece bamboo, from Tribe of Land of Moros, District Lake Lanans, Island of Mindanas, P. I.
- Ox shoe, donated by Mrs. Etta I. Kohl, Indianapolis.
- "What-not" 5 x 3 x 12 feet, walnut, in the Sullivan family since 1865. Old "lap board," early 19th century, held on the lap to cut cloth or other material on. Gold headed cane presented to Algernon Sydney Sullivan about 1860, engraved A. S. S. from S. H. S.; umbrella with silver capped handle, given by Mrs. J. J. Tillinghast, (nee Mary Sullivan, daughter of Judge Sullivan) to her husband in 1888, on their 25th wedding anniversary; cap is marked 1863 J. T. S. 1888. Presented by Mrs. Algernon Sydney Sullivan and son, George H. Sullivan, New York City.
- Pair of wooden shoes worn fifty years by the donor, Francois Hequit, of near New Albany, Indiana. Shoes were made at Edwardsville, Indiana, about 75 years ago.
- Tool used to make cartridges, paper used in making them, pass to Indianapolis Arsenal during Civil War, and tin type of Susan Coffin who made cartridges at the arsenal; purchased from her son, Louis Gill, of Indianapolis, for \$1.
- Six crystal glass candlesticks; 6 Japan vases (teakwood); 1 vase; 1 hammered brass tray. Turkish; 1 boar tusk; 3 glass bon-bon vases; 2 French vases; 1 German vase; wedgwood vase; 3 Austrian vases; 1 Italian vase; Rookwood vase; German stein; candlestick, Vienna; chocolate pitcher, Japan; German eagle; small animal collection; 10 elephants; fish, pine cone; rhinoceros, pine cone; Japanese cup; silver water cooler, very old; statue, September Morn; flag that was in the Bowen-Merrill fire. Loaned by Capt. C. S. Tarlton, Indianapolis.
- Cooper's adz. given in the name of C. W. Holdercroft, Blackford County, Indiana, who first used the adz when he was 13 years old. Adz is now 100 years old, and was secured through the courtesy of his son, Isaiah Holdercroft.
- Two arrow points, presented by Wm. O. Kidwell, Mooresville.
- Fossil stem, presented by E. H. Lee, Fairland, Indiana.
- Cecropia moth, presented by S. D. Tipton, 777 West Michigan Street, Indianapolis.
- Harrison Log Cabin souvenir coin, loaned by Curtis Hester, Indianapolis.
- "Scouts Spies and Detective"; "The Nurse and Spy"; "The Great Rebellion" (two volumes); "The Lives and Graves of our Presidents." Owned by John H. Anderson and donated by John Byron Anderson, Indianapolis.
- Tarantula, presented by Ray Flinchpaugh, Indianapolis.
- Two specimens of the Io moth, by Irvin Perigo, Boonville, Indiana.
- Small quilt of 697 pieces, made in 1864 by Mrs. Nancy Clark, aged 60 years. Presented by Curtis J. Brown, grandson, Indianapolis, Indiana.
- Peacock feathers, given by Mrs. L. A. Blackledge, Rushville, Indiana.
- Pair dark gray vases, decorated on side with buff colored leaves and flowers middle 19th century. Acquired about 1865 by Algernon Sydney Sullivan, son of Judge Jeremiah Sullivan, Madison, Indiana. Pair old cut crystal compotes, period 18th century, English. Gilded china pitcher, moulded as though made of four golden leaves, English Royal Worcester ware. Pair porcelain globular vases or jardiniers, silver surface, gilt handles, decorations of cupids and roses, English about 1850. Acquired about 1875 by the late Mrs. Joseph Tillinghast, of Troy, New York, daughter of Judge Jeremiah Sullivan. All donated by Mrs. Algernon Sydney Sullivan and George H. Sullivan, New York City.
- Phillipine bow, owned by John E. Frazeur; cap and ball gun, owned by David O. Frazeur; loaned by Lewis E. Frazeur, 2002 Sugar Grove, Indianapolis, Indiana.
- Breast pin, presented to Annie Kelch; bracelet, bead ornament, necklace, gloves, presented by Miss Annie Kelch, wife of John W. Warner, Miami, Florida.
- Collection of shells and case, donated by Mrs. Emma McElwee, Indianapolis.
- Organ used in orchestra at old Park theatre, Indianapolis, in 1857, by the director, R. A. Miller. Purchased for \$25 from his daughter, Mrs. R. Stilwell, 2251 Pearson Avenue, Indianapolis.

Shawl bought about 1855, worn by Rosetta Roxana Carrier, donated by Mrs. Minettie Littell, 1605 West Morris Street, Indianapolis.

Badge 79th Ind., 4th Army Corps. Indianapolis, 1900; G. A. R. badge 1905, Lafayette, worn by Daniel Fitch. Donated by Louis Fitch.

Picture, "Grant and His Victories." bought by Samuel Douglass about 1867; loaned by a grandson, Samuel O'Neal.

Shoe string bag made by Louisa Lynch Turner in 1875 at Greencastle; dress made by Lydia Lynch Walls for her son Jeff in 1873 at Greencastle; donated by Alice Walls.

Specimens of garnets and cartridges from Honolulu; donated by Wm. Heiden, Indianapolis.

NATURAL GAS SUPERVISION

The duties of the State Gas Supervisor and his deputies include the enforcement of the conservation laws, the supervision of the plugging of abandoned wells, investigation of reports, the inspection of wells and equipment and the collection of geological data.

A number of inspections were necessary in eastern Blackford County and western Jay County, where several old gas wells had been reported abandoned without proper plugging. Repairs or plugging were ordered in some instances and records were kept to show whether or not the recommendations had been carried out. The deputy supervisor for Blackford County was unable to properly care for matters because of prolonged illness, and it finally became necessary for him to discontinue his work. Mr. C. N. Brown of Geneva was appointed in his place and he has been assigned the Adams County area in addition to Blackford County. No other changes have been made in the inspection force.

It has been possible to follow closely the progress of drilling wells in all sections of the state, due to the accurate information furnished by the drillers and operators and with the assistance of the clipping service and correspondence with other observers.

The Oil and Gas News, containing the summary of all drilling work in the state, has been published the first of each month. The number of addresses on our mailing list has remained at approximately 350. The Oil and Gas News also furnishes a means of keeping drillers and operators in contact with the division. Notices of new publications are published in the news letter, and have brought additional sales for these reports.

The percentage of well records turned in has been high, and a large number of complete sets of drilling samples has been received for study. Cloth sample bags are supplied for the preservation of these samples. In order to increase the information in our files, one drilling contractor of Princeton sent all of his original logs, from which nearly one hundred new records have been copied.

One deep test well in Greene County was found to be wasting gas, and an attempt was made to force the plugging of this well. Since the original owners have left Indiana and can no longer be held responsible, it is likely that another company will take the well over and complete it properly. During the fiscal year ending September 30, 1932, the supervisor and deputies plugged 202 wells.

OIL AND GAS OPERATIONS IN INDIANA IN 1932

The total number of oil, gas and test wells completed in Indiana during the last fiscal year was slightly higher than that for the previous year. The condition of the petroleum market has been generally depressed throughout the year, although prices have increased somewhat over the low marks, and proration orders have not been in effect during the entire period. Additional discoveries of oil and gas supplies have influenced drilling during the year, and the percentage of wells which were producers was 56% as compared to 45% for the previous year. The greater part of the drilling has been in the southwestern counties of the state, although there was some activity in the southern part of the Trenton gas field in eastern Indiana. Gibson County showed the most marked increase in activity.

The markets for gas continued to absorb the production from most of the wells which are large enough to justify the laying of pipe lines. In some sections a failure in supply is threatened, and this has caused more than the usual number of test wells. Of the various test wells drilled in counties far removed from oil or gas production, several have been promotion schemes and none has resulted in important discoveries.

A number of wells in Harrison township, Daviess County, have outlined a gas pool of probable commercial importance. The open flow production of the wells ranges as high as 1,000,000 cubic feet and it is likely that other wells will be drilled in the future, since arrangements are being made for a pipe line to collect the gas.

In Switzerland County several wells have indicated that the pool already partly developed in Carroll County, Kentucky, extends across the river near Vevay. The largest well in Switzerland County has an open flow production of about 1,000,000 cubic feet, but there is no market at present for this gas and further drilling has been halted.

A number of new wells have been drilled in the Columbia township gas pool in Gibson County. One of these was reported as having an open flow production of 17,000,000 cubic feet, probably one of the largest wells drilled in Indiana in recent years. These wells have extended the pool toward the north and east and other locations remained to be drilled.

In Pike County, the Alford pool is also being extended toward the north and east, as the result of finding gas in a test well somewhat removed from the older production. In the Unionville field of Monroe County, there has been very little new drilling, since there has been no connecting line laid to this pool. Scattered wells have been drilled in the Trenton gas field, mainly to bolster the supply of the natural gas companies in this area. The initial production of these wells has been comparatively small because of the extended withdrawals of gas during the life of the field.

Additional drilling has been done in many parts of Perry County and several oil producers have been completed in the Bristow pool. A good flowing well at a shallow depth south of Bristow indicates the opening of a new pool as soon as further tests can be made.

The Vanderburgh County pool north of Evansville has been extended to the east as the result of several good wells drilled near U. S. Highway 41. The prospects of this area are unusually encouraging and at least three rigs are completing new wells.

A number of excellent producers have been completed in Washington township, Gibson County, where the existence of a structure had been forecast by wells drilled several years ago. This pool is small in extent and there are probably but few locations that remain to be drilled. Several of the wells were troubled with water. New drilling for oil is discouraged by the fact that the pipe line companies refuse to accept production from any wells completed after proration orders went into effect. In the Busseron township gas pool near Oaktown, in Knox County, one small oil well has been completed and this may lead to further drilling in the hope of locating an oil deposit. Uncompleted tests will probably determine whether or not this pool extends across the line into Sullivan County.

Some additional drilling has been done in southeastern Spencer County, since the completion of a small refinery at Maxville which furnishes a market for this oil. Testing in Sullivan County has not decreased materially in spite of the fact that a comparatively large proportion of the wells were dry.

A number of more or less important test wells were completed in scattered localities. One of these was near Cicero in Hamilton County, in the center of a territory that was once productive of gas. A showing of gas was recorded, but the operators were searching for oil, which was not found. In Kosciusko County a well located on the strength of a magnetometer survey has not been completed. The results will not be known until it reaches the Trenton formation. Three wells have been started in Dearborn County, the deepest of which has gone some distance below the bottom of the Trenton limestone. Showings of oil and gas have been reported, but they are not as yet commercially important. A deep well in Hendricks County was plugged back to the upper Trenton and shot, but attempts to develop a producer failed.

One of the larger oil companies tested a block of acreage in northern Clay County with a deep well that was not productive. The same company found a showing of gas in a well in Dubois County, but did not believe the territory worthy of further testing. A dry well in Crawford County was drilled in a location where structural conditions were said to be favorable and another dry hole was completed in northern Orange County.

An Ohio company which had obtained several hundred thousand acres of leases in Union, Franklin and Ripley counties, tested these large holdings with six dry holes, each of which was drilled below the bottom of the Trenton formation.

The following statistics showing the production of crude oil in Indiana were released by the Petroleum Economics Division of the Bureau of Mines, United States Department of Commerce.

	1930	1931	First half 1932
Northeastern Indiana	53,000	37,000	17,000
Southwestern Indiana	941,000	803,000	424,000
Total Indiana (bbbls.).....	994,000	840,000	441,000

The following summary of the drilling operations in Indiana from October 1, 1931, to September 30, 1932, inclusive, shows that 169 wells were completed, an increase of 17 over the previous year. There were 47 wells producing oil, 48 produced gas, while 74 were abandoned for failure to show valuable quantities of either. In addition there were 46 wells uncompleted at the end of the period.

COUNTY	Township	Section	Farm and Well Number	Result
Allen	Maumee	34	Fred Norden	Uncompleted
Clay	Dick Johnson	26	St. Louis Joint Stock Land Bank	Abandoned
Crawford	Sterling	32	Arthur Beasley	Abandoned
Daviess	Harrison	34	Bernard Gillooy, No. 2	Abandoned
Daviess	Harrison	27	Home Building and Loan Assn.	Abandoned
Daviess	Harrison	4	Alva C. Smith, No. 2	Gas
Daviess	Barr	35	Ada Walton, No. 2	Gas
Daviess	Harrison	5	John S. Williams	Abandoned
Daviess	Harrison	4	Oliver M. Smith	Gas
Dearborn	Miller	34	Jerry Nowlin	Uncompleted
Dearborn	York	2	Jacob Steinmetz	Uncompleted
Dubois	Madison	7	Anton Hopf	Abandoned
Dubois	Harbison	25	David Neukam, Jr.	Abandoned
Floyd	Georgetown	30	Sharp	Abandoned
Fountain	Troy	28	Gants	Abandoned
Fountain	Cain	2	Snyder & Mason	Abandoned
Franklin	Highland	27	John Becker	Abandoned
Franklin	Laurel	7	Johmie Jinks	Abandoned
Franklin	Brookville	16	Mike Kunz	Abandoned
Gibson	Columbia	22	G. B. Allen, No. 1	Gas
Gibson	Columbia	22	G. B. Allen, No. 2	Gas
Gibson	Columbia	22	G. B. Allen, No. 3	Gas
Gibson	Columbia	22	G. B. Allen, No. 4	Gas
Gibson	Barton	8	R. S. Gregory	Uncompleted
Gibson	Washington	19	L. M. Gaston	Abandoned
Gibson	Columbia	23	L. W. & E. F. Gudge, No. 1	Gas
Gibson	Columbia	23	L. W. & E. F. Gudge, No. 2	Gas
Gibson	Washington	18	Agnes Haskins, No. 2	Oil
Gibson	Washington	18	Agnes Haskins, No. 3	Oil
Gibson	Washington	18	Agnes Haskins, No. 4	Oil
Gibson	Columbia	23	Eunice C. Heldt	Uncompleted
Gibson	Washington	13	F. P. Hope	Abandoned
Gibson	Washington	18	Lottie A. Hope, No. 1	Oil
Gibson	Washington	18	Lottie A. Hope, No. 2	Oil
Gibson	Washington	18	Lottie A. Hope, No. 3	Oil
Gibson	Washington	19	Nora Hope, No. 1	Oil
Gibson	Washington	18	Robert Huey	Oil
Gibson	Washington	19	Elmer Hunt	Gas
Gibson	Washington	18	Ethel Kell	Abandoned
Gibson	Columbia	23	S. H. & A. L. Kirk	Uncompleted
Gibson	Wabash	21	Amanta Maier	Abandoned
Gibson	Columbia	23	J. N. Malone	Gas
Gibson	Columbia	22	R. M. Onyett, No. 3	Gas
Gibson	Washington	19	Mary R. Richardson	Abandoned
Gibson	Columbia	23	G. C. Sampley	Uncompleted
Gibson	Columbia	22	Robert L. Sims	Gas
Gibson	Washington	18	C. T. Sloan, No. 5	Oil
Gibson	Washington	18	C. T. Sloan, No. 6	Oil
Gibson	Columbia	22	Carl C. Steele	Oil
Greene	Washington	4	Mayer & Fisher	Abandoned
Greene	Washington	9	Walter Suphine	Uncompleted
Hamilton	Jackson	34	E. E. Applegate	Abandoned
Hamilton	Jackson	6	Nellie Graham	Uncompleted
Hancock	Jackson	22	Citizens Bank	Abandoned
Hancock	Vernon	11	M. & W. Bolander, No. 1	Gas
Hancock	Vernon	10	M. & W. Bolander, No. 2	Gas
Hancock	Vernon	10	Fred Caudell	Gas
Hancock	Vernon	16	E. B. Fort	Gas
Hancock	Vernon	9	John W. Hudson	Uncompleted
Hancock	Jackson	22	Chas. Ramsey, No. 6	Gas
Hancock	Jackson	27	Sherman Smith	Gas
Hancock	Jackson		Thomas L. Smith	Uncompleted
Harrison	Jackson	25	Chas. Burkhart	Abandoned
Harrison	Taylor	12	Dan Cunningham	Gas
Harrison	Taylor	7	J. & L. Cunningham, No. 2	Gas
Harrison	Taylor	7	Bettie L. Fox	Gas
Harrison	Webster	10	Wm. Longbottom	Abandoned
Hendricks	Liberty	8	T. A. Reitzel	Abandoned
Henry	Henry		Chas. E. Jackson	Gas

COUNTY	Township	Section	Farm and Well Number	Result
Henry	Fall Creek	1	J. F. McCormack	Gas
Henry	Wayne	12	Mary E. Reed, No. 3	Gas
Jay	Wayne	25	Wm. C. Bailey	Gas
Johnson	Franklin	28	A. H. Vandivier	Uncompleted
Knox	Busseron	14	M. E. Bond	Abandoned
Knox	Busseron	11	John Black	Abandoned
Knox	Busseron	Loc. 261	Emmett Biann	Gas
Knox	Busseron		Evans	Gas
Knox	Busseron	13	Ruby Hite	Abandoned
Knox	Busseron		Prather	Gas
Knox	Busseron	Loc. 252	Snapp	Abandoned
Knox	Busseron	Loc. 290	Anna Sproat	Oil
Knox	Busseron	9	Union Investment Co.	Abandoned
Knox	Busseron	3	Floyd Wilson	Abandoned
Kosciusko	Van Buren	10	W. O. Wehrly	Uncompleted
Lagrange	Clay		Clair Shoup	Uncompleted
LaPorte	Wills	33	W. & C. Drollinger	Abandoned
LaPorte	Lincoln	4	John Siddles	Abandoned
Martin	Perry	19	John Larkin	Uncompleted
Monroe	Benton	19	Wm. T. Howard	Uncompleted
Monroe	Benton	8	C. M. Young	Gas
Ohio	Randolph	2	Ira North	Uncompleted
Orange	Orangeville	30	Fred Cleveland	Abandoned
Perry	Clark	19	Lee Aders, No. 4	Oil
Perry	Clark	19	Lee Aders, No. 5	Abandoned
Perry	Troy	13	Mary C. Backer, No. 4	Uncompleted
Perry	Clark	19	George K. Beard, No. 1	Abandoned
Perry	Clark	19	George K. Beard, No. 2	Oil
Perry	Clark	19	George K. Beard, No. 3	Oil
Perry	Clark	19	George K. Beard, No. 4	Abandoned
Perry	Clark	30	Frank Cassidy, No. 6	Oil
Perry	Clark	30	Frank Cassidy, No. 7	Oil
Perry	Clark	25	H. Cassidy	Oil
Perry	Leopold	16	James Cassidy, No. 1	Uncompleted
Perry	Anderson	21	James Cassidy, No. 2	Uncompleted
Perry	Clark	30	Jerome Cassidy	Abandoned
Perry	Troy	19	Rosa Conen	Abandoned
Perry	Tobin	8	U. B. Cummings	Abandoned
Perry	Clark	13	Wm. Dotson	Abandoned
Perry	Clark	30	Alvin Franchville, No. 2	Oil
Perry	Clark	30	Alvin Franchville, No. 3	Oil
Perry	Clark	30	Alvin Franchville, No. 4	Oil
Perry	Anderson	6	Math Gayer, No. 1	Oil
Perry	Anderson	5	Math Gayer, No. 2	Uncompleted
Perry	Anderson		Ben Harpman	Abandoned
Perry	Clark	17	John Kaufman	Oil
Perry	Clark		Lisher	Uncompleted
Perry	Clark	33	Henry Law	Abandoned
Perry	Troy	11	Andrew Peters, No. 1	Oil
Perry	Troy	11	Andrew Peters, No. 2	Uncompleted
Perry	Troy	23	Chas. Reed	Uncompleted
Perry	Tobin	34	Wm. Schmahl	Abandoned
Perry	Anderson	30	Emery Simpson	Abandoned
Perry	Anderson	19	Margaret Taylor	Abandoned
Perry	Clark	17	James Thiery	Abandoned
Pike	Washington	17	Edward Adams	Uncompleted
Pike	Washington	17	John Arnold	Gas
Pike	Washington	23	Frank Bilderback	Gas
Pike	Washington	18	C. Bradford	Uncompleted
Pike	Madison	26	John O. Carter	Oil
Pike	Clay	32	Jennie Cassidy	Oil
Pike	Washington	19	Craig Heirs, No. 2	Gas
Pike	Washington	19	Craig Heirs, No. 3	Gas
Pike	Washington	27	Geo. P. Frank	Abandoned
Pike	Washington	20	Aaron George, No. 6	Gas
Pike	Clay		James Lindy, No. 2	Oil
Pike	Logan	23	E. Loveless, No. 10	Oil
Pike	Logan	14	E. Loveless, No. 11	Oil
Pike	Logan	14	E. Loveless, No. 12	Oil
Pike	Washington		McCain	Gas
Pike	Washington	26	Geo. C. Morgan	Abandoned
Pike	Washington		R. & F. Morrison, No. 3	Gas
Pike	Clay	Surv. 5	Phavilla Murray	Abandoned
Pike	Logan	14	Glendora Robling, No. 1	Oil
Pike	Logan	14	Glendora Robling, No. 4	Oil
Pike	Clay	34	L. J. Shawhan	Abandoned
Pike	Washington	19	Walter Smith	Abandoned
Pike	Washington	17	W. H. Smith	Uncompleted
Pike	Jefferson	16	Thomas H. Stone	Uncompleted
Pike	Washington	19	James Thomas, No. 2	Abandoned

COUNTY	Township	Section	Farm and Well Number	Result
Pike	Washington	13	Andrew Willis	Uncompleted
Ripley	Otter Creek	21	Samuel W. Hull	Abandoned
Ripley	Laughery	10	Herman Siebert	Abandoned
Rush	Jackson		Mauzy	Uncompleted
Rush	Ripley		Stout	Gas
St. Joseph	Harris	29	Harry Sones	Uncompleted
Shelby	Hanover	1	Lora V. Cole	Gas
Spencer	Huff	11	Marie Berg, No. 4	Oil
Spencer	Huff	11	Marie Berg, No. 5	Oil
Spencer	Ohio	3	Catherine Bretz, No. 2	Oil
Spencer	Ohio	34	John Bretz Heirs, No. 2	Oil
Spencer	Huff	11	F. W. Grass, No. 1	Uncompleted
Spencer	Huff	11	A. G. Grass, No. 3	Oil
Spencer	Huff	11	A. G. Grass, No. 4	Oil
Spencer	Huff	11	Wm. Grass, No. 1	Abandoned
Spencer	Huff	11	Wm. Grass, No. 2	Abandoned
Spencer	Huff	11	Wm. Grass, No. 3	Oil
Spencer	Ohio	8	Anna Hawk, No. 1	Abandoned
Spencer	Ohio	8	Anna Hawk, No. 2	Oil
Spencer	Ohio	8	Anna Hawk, No. 3	Oil
Spencer	Huff	35	Louis Heubschman	Uncompleted
Spencer	Huff	35	J. Heubschman	Abandoned
Spencer	Huff	11	Phillips Heirs	Abandoned
Spencer	Huff	3	Gus Sauter	Abandoned
Spencer	Ohio	4	Hugh Stuteville, No. 2	Abandoned
Starke	Davis	35	Lincoln Nat'l. Life Insurance Co.	Uncompleted
Sullivan	Jefferson	21	Bedwell & Lucas	Abandoned
Sullivan	Turman	23	Wm. Bell, Jr., No. 1	Abandoned
Sullivan	Turman	1	Clarence Blount	Uncompleted
Sullivan	Curry		Willis Bradbury	Gas
Sullivan	Turman	14	C. L. Davis, No. 6	Oil
Sullivan	Turman	14	C. L. Davis, No. 7	Abandoned
Sullivan	Turman		Willis Farrand	Abandoned
Sullivan	Hamilton	21	Josie Frakes	Abandoned
Sullivan	Hamilton	29	Elizabeth Hull	Abandoned
Sullivan	Jackson	10	Jackson Hill Coal Co.	Uncompleted
Sullivan	Curry	29	Alva Maris, No. 2	Abandoned
Sullivan	Curry	20	Ross L. Maris	Gas
Sullivan	Turman	24	Tom & Kern Metzger	Uncompleted
Sullivan	Haddon	10	Meyer, No. 1	Abandoned
Sullivan	Haddon	10	Meyer, No. 2	Uncompleted
Sullivan	Curry	20	A. Pittman	Abandoned
Sullivan	Turman	32	John Rose Estate	Uncompleted
Sullivan	Turman	7	Katherine Piety	Abandoned
Sullivan	Curry	20	Dolphia Sludder	Gas
Sullivan	Turman	36	H. H. Wilson	Uncompleted
Switzerland	Jefferson	14	Clarence Carter, No. 1	Gas
Switzerland	Jefferson	14	Clarence Carter, No. 2	Uncompleted
Switzerland	Craig	16	Lawrence Cooper	Gas
Switzerland	Craig	20	R. E. Crutcher	Uncompleted
Switzerland	Craig	8	James Hankins	Gas
Switzerland	Craig	17	Joseph Krummel	Gas
Switzerland	Craig	16	Ira and David Wiseman	Gas
Tippecanoe	Tippecanoe	27	M. E. Church	Uncompleted
Union	Harrison	30	Harrison Laluze	Abandoned
Vanderburgh	Center	33	County Poor Farm, No. 2	Oil
Vanderburgh	Center	33	John & Mary Effinger, No. 1	Oil
Vanderburgh	Center	33	John & Mary Effinger, No. 2	Oil
Vanderburgh	Center	33	Evansville Gun Club	Oil
Vanderburgh	Center	32	Geo. Hornby, No. 1	Oil
Vanderburgh	Center	33	Geo. Hornby, No. 2	Uncompleted
Vanderburgh	Center	33	Theodore Kinder, No. 2	Oil
Vigo	Prairie Creek	22	Cyrus J. Lane	Uncompleted
Vigo	Prairie Creek	32	Wm. Riggs, No. 22	Uncompleted
Warrick	Greer	28	Henry Kohle	Abandoned
Warrick	Greer	28	Henry Menke	Abandoned