

REPORT OF THE STATE NATURAL GAS SUPER-
VISOR FOR THE YEAR 1908.

BY

B. A. KINNEY.

Office of State Natural Gas Supervisor,

MARION, IND., February 1, 1909.

*Prof. W. S. Blatchley, State Geologist, State House, Indianapolis,
Indiana:*

Sir—I have the honor to submit to you herewith, my Annual Report as State Natural Gas Supervisor, for the year 1908, being the Seventeenth Report from this Department.

There have not been any extensive new developments of natural gas territory in the State since my report of a year ago; nor have there been many changes in conditions with respect to developments and production in the old gas fields, which have been discussed in my former reports.

I have endeavored to give by this report such information as I have acquired in my visits over the gas fields of Indiana, and offer such suggestions and recommendations as I think are proper for the purpose of conserving the gas supply of the State.

I hope this report will meet with your approval, and that it may be read by all who may be interested or affected by the subjects on which it dwells.

Respectfully yours,

BRYCE A. KINNEY,
State Natural Gas Supervisor.

Annual Report of the State Natural Gas Supervisor.

The act of the Legislature in creating the office of State Natural Gas Supervisor was, no doubt, to the end and purpose of having an official to observe, study and report conditions of the gas fields, and to offer suggestions for consideration relative to the proper conservation of the gas supply of Indiana.

As supervisor I have always believed it a duty to report the glaring evils and abuses which have grown out of the gas operations in this State, which have come to me through observation and experience, and in previous reports have made full mention concerning the subject, with suggestions to correct and cure the same.

In my last annual report, February 1, 1907, I gave considerable space to the subject of the injurious effect upon the natural gas fields resulting from the failure of gas and oil operators to properly plug abandoned wells. It is probably unnecessary to repeat in this report what has been heretofore reiterated, any further than to say—that the waste of gas from open, abandoned wells still continues, and that by reason of wells being left unplugged, the surface and subterranean waters flow into and permeate the gas bearing rock strata, the result of which stops the flow of gas in wells for many miles adjacent to the unplugged well where the mischief originates.

It is well known by geologists that the gas-bearing strata of rock in the main gas fields of Indiana are connected, and that an injury to one section is an injury to the entire territory.

As there are twenty-seven counties in Indiana in which natural gas is produced, and in which drilling continues, I could not be expected to be present at all times when wells are drilled in and abandoned—hence, I am able to detect but few of the violations of the law in that respect.

The provisions made by law for the office of State Natural Gas Supervisor are not now adequate for the proper performance of the duties of the office. I think that a proper appreciation of the importance of the office—that is to say—of what might be accomplished for the good of the people of the State by an officer armed with proper authority and with legal resources, would lead to the

enactment of salutary legislation which would make this office a power for good. Remedial legislation is needed to make the powers of this office more extensive and effective.

PUMPING STATIONS.

The subject of pumping stations was dwelt upon at some length in my last report. As was stated therein the gas-bearing strata are rapidly exhausted by this artificial pressure, and in all the gas territories wherein these stations exist, or have existed, the gas supply has failed, or is steadily failing and growing weaker.

Certain gas companies having chains of hundreds of wells use pumps to increase the natural pressure from the wells and then reinforce this by artificial pressure applied to the gas mains or pipe lines. The result has been that wells drilled by other parties in the same fields were weakened and destroyed by the drawing from them of the gas by the pumping plants, and the gas fields in which these plants exist, or have existed, are prematurely exhausted. The first legislation aimed at preventing this very evil shot wide of the mark. The law was an attempt to prevent the piping of gas out of the State. This law was declared to be unconstitutional by the Supreme Court. It seems likely that a law to prevent the addition of artificial pressure to the gas flow would have been the proper enactment, and would have been under the power of the State, and would have answered the desired purpose. The pumping stations also by the suction of their pumps have the effect of drawing the subterranean waters into the gas-bearing strata, which permeate for many miles and affect the gas fields at great distances from the point where the injury originated.

I believe there should be some wholesome legislation on this matter. The pumping station is an evil and threatens the existence of the gas field wherever it is placed. It should be prohibited by law.

At the present time the only pumping stations existing in Indiana are the following: That of the Hazelwood Gas Company at Anderson; the station at Richmond of the Richmond Natural Gas Company; the station of J. M. Leach on the east side of Howard County; the two stations of the Indiana Natural Gas and Oil Company—one near Fairmount, Grant County, the other at Greentown, Howard County; the stations of the Southern Indiana Gas Company of Decatur County; the Shelbyville Gas Company of Shelby County, and the station near Upland of the Huntington Light and Fuel Company.

THE OLD FIELD.

In Madison County many wells are being drilled for natural gas and a steady production is maintained—sufficient to keep up with the consumption. Gas, of course, is only used for domestic purposes. The same may be said of the Delaware County field adjoining. Gas wells in these two counties show a pressure of from twenty to one hundred pounds.

In Grant County many wells are being drilled. Wells lately drilled, and within the last year, show a pressure of from forty to one hundred pounds. The Marion Gas Company, which supplies the natural gas to the city of Marion, has drilled a great many wells within the last year, showing a pressure of from forty to one hundred pounds. This company also buys the gas from oil operators when gas appears in a well drilled for oil. A great many of these wells have been developed.

In Jay County wells have been drilled within the past year showing a pressure of from twenty to one hundred and sixty pounds. Drilling there continues, although no particularly strong wells have been developed.

Howard County gas conditions claim particular mention: It is claimed by parties qualified to make the statement that the gas supply in that region is better than for two years past—both as to production and capacity of wells. Among those who have been active in the drilling of new wells which have proven valuable producers are J. M. Leach, the Kokomo Plate Glass Company and the Indiana Natural Gas and Oil Company.

Conditions continue favorable in the gas fields in Hancock and Shelby counties. Drilling continues and gas is found in fair quantities.

Decatur County citizens are fortunate in that they have a good gas supply—still undiminished, which is furnished them for domestic use at the rate of fifteen cents per thousand cubic feet. The wells drilled in that field show a pressure of three hundred pounds. In that field they have more gas and cheaper gas than in any field in the State.

THE NEW FIELD.

My last report contained considerable information concerning the Sullivan fields in Sullivan County. At that time, from developments, it appeared that that field would be one of the richest in production in the entire State, but the record of that field during

the past year has not materialized its earlier promises, and I am forced to say that the latest operations there have not been profitable, at least to the extent that had been anticipated. Gas is still produced in paying quantities, and all wells drilled show some gas, but the flow of oil found in that territory interferes with the gas pressure and retards the production of gas. As is well known that has been the history of other gas fields. Where the oil comes in the gas supply suffers. Still, I am pleased to report that in that field drilling still continues, and a few paying wells have been developed, from which the gas finds a ready market. These wells all show oil in small quantities.

In the counties of Pike, Warrick and Gibson gas and oil operations are at the present time very active, and have been for the past year.

The same may be said of Dubois county, where operations are now being carried on for both oil and gas.

In all these counties oil operators have leased thousands of acres for drilling purposes and are paying liberal bonuses for the same. This field has promise of being very fruitful, both in oil and gas—many of the wells drilled showing a paying flow of both.

Operations in Gibson County still continue—and there is found an ample flow of gas. Almost all operations there are for oil, but gas is found in all wells from which an oil flow is developed. My last report states that all oil wells have uniformly shown a fair flow of gas, and the same statement can be made as to wells in that field within the past year.

In Pike County one or two old wells have been revived and are now producing gas just as if they were newly drilled. However, this field is not particularly promising.

Within the past year, and prior thereto, active operations have been carried on in the counties of Floyd, Scott, Clark, Harrison and Crawford by hopeful seekers after natural gas. This field has proven a great disappointment. Drilling is still extensively carried on within this territory, but without any profitable results, as no wells of profit have been developed.

In continuation of the statements above concerning the gas fields in Pike and Gibson counties, it may be said that at the present time about fifteen strings of tools are busy in that territory, and so far in many of the wells drilled there has been a fair showing of gas, and in the majority of wells produced the gas is in paying quantities.

Herewith I present the record of two wells drilled in Pike County:

The following figures relate to a well drilled by the Pure Oil Company in April, 1908, located on the Maynard Burnett farm in Monroe Township, Pike County:

393 feet.....	10 in.
873 feet.....	8¾ in.
1,070 feet.....	6¾ in.
1,146 feet.....	To sand
1,181 feet.....	Finished
Pressure.....	522 pounds
Daily capacity.....	5,000,000 cu. ft.

The following figures relate to a well drilled by the Rogers Oil Company, one-half mile north of the above described well:

314 feet.....	10 in.
884 feet.....	8¾ in.
1,080 feet.....	6¾ in.
1,150 feet.....	To sand
1,176 feet.....	Finished

This last-named well was drilled in the month of December last, and has a capacity of 2,000,000 cubic feet daily, with a pressure about the same as the well first above described.

Cox & Gibson, during December last, drilled in a gas well in Monroe Township, Pike County, one mile distant from the Rogers Oil Company well, on the Skinner farm, which shows a daily capacity of two million cubic feet. This well was drilled to about the same depth as the two wells above mentioned.

The prospects for this gas field appear very bright.

GENERAL SUMMARY.

There are at the present time twenty-four counties in the State of Indiana in which natural gas is produced and used as a fuel. These are as follows:

Adams,	Hancock,
Blackford,	Jay,
Delaware,	Miami,
Decatur,	Madison,
Dubois,	Pike,
Franklin,	Randolph,
Grant,	Rush,
Gibson,	Shelby,
Huntington,	Sullivan,
Howard,	Tipton.
Hamilton,	Wabash,
Henry,	Wells.

In none of these counties is gas being used to any extent for manufacturing purposes, but is only available for domestic use.

In the gas producing localities where the well-plugging laws are best observed, and lived up to and best enforced, the gas pressure from old and weak wells has oft times been revived, and it may also be stated that at places in the gas field where pumping stations formerly were maintained, the gas wells, old and new, showed a renewed pressure immediately upon the abandonment of these pumping stations, which shows the ruinous effects of these stations upon the gas-bearing rock strata.

At this time there is, speaking approximately, being produced in the State of Indiana 10,000,000 cubic feet of gas per day. The average price of gas per thousand cubic feet, over the State, is 30 cents. This represents a daily production from the flow of gas of \$3,000 or \$900,000 in one year.

The natural gas supply of Indiana is one of the most valuable of our natural resources, and is the one most easily wasted and destroyed by the negligence of persons who are only interested in the immediate profits of drilling into gas or oil territory and making a profit from a lucky strike, and who will if a well shows no oil production abandon the same without plugging. Many wells are "pulled" by dealers in second-hand pipe and casing without proper attention to the wells, in all cases leaving an opening to the gas-bearing strata whereby the gas can seep out and be lost and the underground water may permeate the gas-bearing rock and destroy the free flow thereof—all of which has been set forth in this report, and was at more length made a part of my previous annual reports from this department.

I have in this report stated that the present laws are inadequate to bring about the results for which the Office of State Natural Gas Supervisor was created. As I have said herein, many violations of the laws respecting natural gas regulations go unpunished and are not detected, as it is impossible for one person to cover efficiently all parts of the State.

Respectfully submitted,

BRYCE A. KINNEY,
State Natural Gas Supervisor.

Marion, Indiana, February 1, 1909.