OIL PROSPECTS IN THE "TRENTON" OF WESTERN ILLINOIS.

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Western Illinois is underlain by the "Trenton" and other geological horizons having possibilities for commercial oil production. The Illinois Geological Survey has mapped parts of this area and discovered structures that are favorable in places for oil accumulation. Drilling where favorable structure has been shown, does not guarantee commercial production, but a test on known structure will start with better chance of good results than will one in an unmapped territory. In addition the cost of testing an area which has been mapped geologically to decide to a certain definite degree its merits, will be very much less than the cost of testing an unmapped territory as thoroughly. Therefore, the structure maps for western Illinois, as published by the State Geological Survey, are of considerable value.

The production in the "Trenton" in Monroe County draws attention to the possibility of production in this horizon in other counties in western Illinois. Randolph, St. Clair, Madison, Jersey, Calhoun, Scott, Pike, and adjoining counties, certainly offer chances in the "Trenton" and also in overlying horizons in places. Unfortunately, no detailed geological work of a nature that would show favorable structure has been done to date in most of this area. It is hoped that in the near future it will be possible to cover considerable of this territory with detailed surveys. In the meantime attention might well be directed to areas where structural conditions have been studied in some detail and where the "Trenton" horizon can be reached at depths from 450 to 900 feet. Some of these structures have been tested to the shallower chance (usually the Hoing sand), but in only a very few cases has the "Trenton" been tested on or near structure. In addition to the production in Monroe County, indications of oil are seen in the asphaltic residue which has been noted in Jersey and Calhoun counties, and also in the widespread scattered occurrences of oil which
have been found in the “Trenton” elsewhere in Illinois. Although nothing of special importance in the way of “oil shows” has been noted in holes to the “Trenton” in the counties north of Calhoun and Greene, it is thought worth while to test the “Trenton” on the known structures, wherever that formation can be reached at shallow depths, as despite the fact that success cannot be assured, the extensiveness of the area that can be tested cheaply in this way might offset an even smaller chance of production.

State Geological Survey Bulletin 40 shows contours in the old Pittsfield gas area and the adjoining country. The “Trenton” here has not been tested on structure, and it is reached at from 450 to 800 feet, depending on the location. Bulletins 30, 31, 33, and 40 show structures in parts of Brown, Adams, Schuyler, Hancock, McDonough, Henderson, Warren, Fulton, and Knox counties. Some of these in McDonough and Hancock counties have proven productive in the Hoising sand, 250 feet approximately above where the “Trenton” would be expected to show oil. Several of the structures in the above counties gave unsatisfactory results in tests for the Hoising sand, but in no case at present known to the Survey have these structures been properly tested for the “Trenton”, which formation occurs under these structures at depths down to 900 feet as an approximate maximum. At the present time it would perhaps seem more advisable to test the “Trenton” chance on some of the above structures than to test it in the territory which is closer to the Waterloo production, but for which no geological structures have been shown.