

STATE OF ILLINOIS  
DEPARTMENT OF REGISTRATION AND EDUCATION  
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**STATE GEOLOGICAL SURVEY DIVISION**  
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**PRESS BULLETIN**

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(For immediate release)

**OIL AND GAS IN MONROE COUNTY, ILLINOIS.**

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The third well on the Waterloo-Columbia dome, Ellis and Sutherland's Robert Friedrich No. 1, SE.¼, SW.¼, sec. 35, T.2 S., R.10 W., is very encouraging. This well found the "Trenton" at about 370 feet and the pay from 391 to 427½ feet. The well was not shot. The "sand" is a porous crystalline lime (Kimmswick) and apparently not dolomitic. The well was pumped first on January 27 and 28, 1921, and made approximately 250 barrels of oil the first day, pumping on the beam from one string of 2-inch tubing. Lack of tankage has to date prevented a thorough knowledge of the well's capacity. At present it is being pumped by a small gasoline engine, from two strings of 2-inch tubing. The nature of this temporary outfit may be insufficient to properly gage the well. The Ohio Oil Company's Gaertner Nos. 1 and 2, have not been pumped as yet, but are now equipped to pump. These wells were shot and can not be estimated accurately at present; they are apparently considerably smaller than the Friedrichs No. 1.

The first sample of oil taken by the State Survey showed the oil to be rather exceptional, at least for Illinois oil. The Beaume gravity was 30.1° at 60° F., but about 5 per cent gas was evolved from the sample. With less gas the gravity of this oil will probably be well below 30°. The coke residue was exceptionally high—about 20 per cent—but the oil recovered was apparently much lighter than would be expected from a crude of this gravity, and the products at the temperatures at which they were obtained seemed unusually light. More tests are under way, and it is possible that the quality of the distillates may considerably offset the disadvantage of the high coke residue.

Considerable drilling is expected in this area but the Survey wishes again to caution the operators that the productive area on this dome, shown first in our Press Bulletin of last April, may be small. The chief significance of the

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wells to date is that where suitable local structure exists in this area it is reasonable to expect commercial production in the "Trenton" horizon. It is hoped that there will not be much haphazard drilling. The shallow depth necessary to test the sand makes drilling inexpensive and the possibility of finding wells as large as Ellis and Sutherland's Friedrichs No. 1 may encourage wildcatting. But as other major structures exist in this general area, it is hoped that geological work may find other local structures equivalent commercially to the Waterloo dome, so as to confine the drilling to the most likely localities.

The comparatively high relief of this area allows only very accentuated local irregularities to be seen without detailed leveling. This area was first worked some years ago by Dr. Stuart Weller of the Survey, and his maps brought out the Waterloo-Columbia dome without detailed leveling. Dr. Weller's work also shows the continuation of this anticline northward to the Mississippi River bluffs near Sugar Loaf School. (The anticline may be seen there from the electric line or from the road a short distance south of Dupo.) It is not known whether any local structures exist on this northern extension, but since faults exist, the area should not be looked on with optimism until details can be worked out. Another anticline outcropping at Salt Lick Point above Valmeyer brings the "Trenton" to the surface but the trend of this fold is southeastward (running to the east of Maestown) in which direction the cover gradually thickens over the "Trenton", just as it does eastward toward the Waterloo-Columbia fold. In both these general areas it is possible that local structures exist; therefore the State Survey will put a party in the field as soon as conditions permit.

The Survey has been receiving inquiries about adjacent areas but at present there is insufficient data on which to base more than very general recommendations. In the meantime the areas north of Columbia, southeast from Valmeyer, and between the Valmeyer anticline and the fault west of the Waterloo-Columbia anticline should not be considered too optimistically until further work shows some favorable details. The State Survey wishes to make an appeal to all operators to turn in accurate well records. Otherwise it will not be in a position to further the prospecting in the same manner as to date.

FOOTNOTE:—We especially wish accurate depths to the top of the comparatively hard cap above the "pay sand" which is the top of the "Trenton." The grayish-blue lime above this cap is not "Trenton."