clines. The structural conditions are very favorable in the western half for the segregation of any oil or gas therein into commercial pools, only two non-productive wells having been drilled in this portion, and three in the eastern half. These

borings will now be discussed from west to east.

The Daniel Sinclair No. 1 well (90), located in the southwest edge of the district in the Evansville Basin, 0.6 mile northwest of Dent, was drilled by J. G. Wolf of Sistersville, W. Va., to a depth of about 1300 feet, resulting in a dry hole. The boring starts about 100 feet above the horizon of the Upper Freeport coal, and should have penetrated the main division of the Big Injun sand. A log of the well could not be obtained, so it is not known at what depths shows of oil, gas or water, if any, were encountered. This test, in connection with the other two dry holes (69 and 67) in this Basin northward to Newburg, demonstrates the barren nature of the usual productive zones in the territory of this report. The Sinclair well (90), however, does not test the sands below the Big Injun.

The W. A. Watson No. 1 well (97), located in the east edge of Fellowsville, about one-third the way up the eastern slope of the Evansville Basin, was drilled by Hon. J. M. Guffey of Pittsburgh, Pa., several years ago, resulting in a dry hole. The Survey was unable to obtain the log of this boring or any definite information as to whether oil or gas

shows were encountered.

The Eli and Samuel Nose No. 1 well (99), located in the southeast border of the district on Little Buffalo creek, 2.3 miles eastward from Sinclair, was drilled during the Civil War to a depth of about 600 feet, according to Howard Gore of Clarksburg, who now owns the land on which the test is situated. The boring starts in the Catskill measures and should have penetrated all the known productive sands of the State. Neither oil nor gas was found in paying quantities, but the well flows a strong stream of fine fresh water. This test is located two miles down the steeply pitching western slope of the Etam anticline, and, from a structural standpoint, was very poorly selected. No log of this well could be obtained.

The Peasley Bros. No. 1 well (100), located on Buffalo creek near Etam, one-third mile east of the axis of the Etam

are very favorable in the i any oil or gas therein into oductive wells having been in the eastern half. These a west to east.

1 (90), located in the south-Evansville Basin, 0.6 mile J. G. Wolf of Sistersville, feet, resulting in a dry hole. above the horizon of the have penetrated the main A log of the well could not t what depths shows of oil, tered. This test, in connec-(69 and 67) in this Basin ates the barren nature of the pritory of this report. The not test the sands below the

ell (97), located in the east nird the way up the eastern was drilled by Hon. J. M. al years ago, resulting in a le to obtain the log of this on as to whether oil or gas

on Little Buffalo creek, 2.3 drilled during the Civil War cording to Howard Gore of and on which the test is situlatskill measures and should roductive sands of the State. In paying quantities, but the refresh water. This test is ply pitching western slope of ructural standpoint, was very ell could be obtained.

ell (100), located on Buffalo east of the axis of the Etam

anticline, was drilled about the year 1830 by a man named Butterfield to a depth of 1700? feet, primarily for salt, according to data given Reger by F. M. Clarkson, a resident of the latter place. No log of this boring was obtained, but the well starts in the Chemung, several hundred feet below the base of the Catskill series and below the known productive sands of the State. The depth (1700') reported at this early date is probably erroneous, since the present day drilling equipment has been developed only during the last 60 years.

The John Funk No. 1 well (101), located on the west bank of Cheat river at the mouth of Buffalo creek and one-half mile down the eastern slope from the crest of the Etam anticline, was drilled 40 to 50 years ago. No log was obtained but the boring starts deep down in the Chemung, 500 to 600 feet below the base of the Catskill series; hence, the chances for getting oil or gas were very remote.

Prospective Oil and Gas Areas, Reno District.—The chances of finding either oil or gas in that portion of Reno east of Laurel Ridge are extremely doubtful for reasons brought out above. West of this Ridge the structure is quite favorable for both, but the same old doubt exists as to whether or not their genesis ever took place in this region. That area lying along the southwest border of the district mostly on the waters of Left fork of Sandy, and westward from the 1300-foot contour of the Upper Freeport coal as outlined on Map II to the Beverly Turnpike, is specially favored structurally for gas and oil; the crest of the structural dome at Marquess, for gas; and that, along the Basin, one mile eastward, for oil. A structural terrace is formed at Tunnelton where the Preston anticline dies down into the steep western slope of the Etam arch, a feature that is frequently associated with oil pools in the western counties, and should a gas field be developed along the crest of the former fold northward from Howesville, a test for oil is specially recommended at the southwest edge of Tunnelton.

Portland District.

Portland district lies immediately northeast of Reno, the most of its area being affected by the intense folding associated with the great Briery Mountain anticline which divides it in