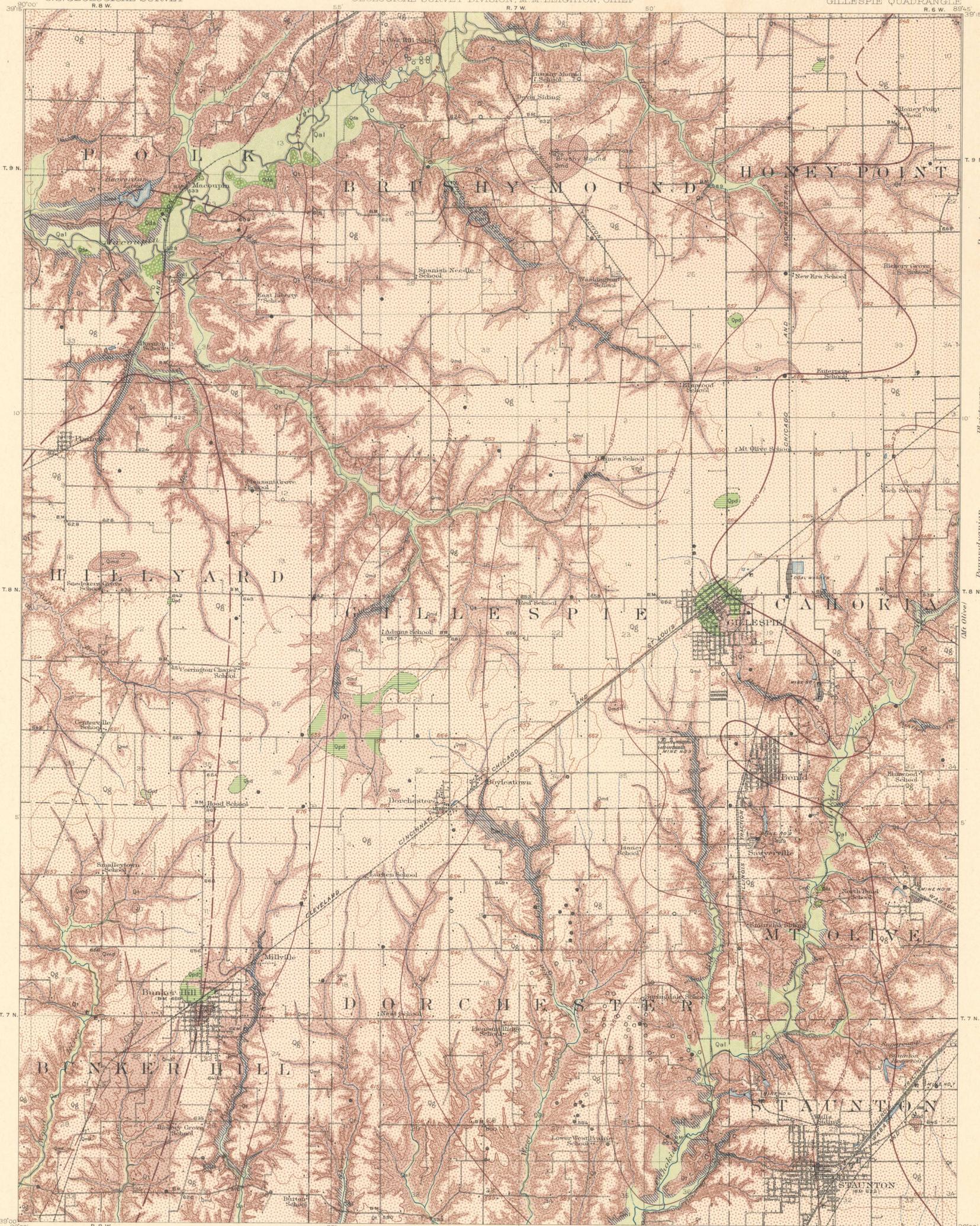


AREAL GEOLOGY

STATE OF ILLINOIS
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

DEPARTMENT OF REGISTRATION AND EDUCATION
A.M. SHELTON, DIRECTOR
GEOLOGICAL SURVEY DIVISION, M.M. LEIGHTON, CHIEF

ILLINOIS
(MACOUPIN COUNTY)
GILLESPIE QUADRANGLE



EXPLANATION

SEDIMENTARY ROCKS

(Areas of subaqueous deposits are shown by patterns of parallel lines; subaerial deposits by patterns of dots and circles)

Qal
Alluvium
(In flood plains of present streams, hills and some gravel more sandy where streams drain horizontal areas)

Qda
Dissected older alluvium
(sand and gravel on low terraces)

Qpd
Remnants of old pond deposits
(grayish black carbonaceous clay grading up into gravelly white in central part; approximate outline of the ponds shown by dashed lines)

Qg
Upland gumbo
(retrogressive yellowish-gray clay)

Qmd
Morainal drift
(masses of gravelly and coarse sandy clay, some lenses of clean sand and gravel)

Qt
Glacial till
(dark bluish-gray gravelly and sandy clay)

UNCONFORMITY

Cml
McLeansboro formation
(shaly shale and sandy shale with some sandstone, thin beds of coal and several limestone beds; underlies all Quaternary deposits in the quadrangle)

ECONOMIC AND STRUCTURE DATA

Structure contours on top of Herrin (No. 6) coal
(dashed lines; position of coal indicated by dashed lines; contour interval 20 feet; datum mean sea level)

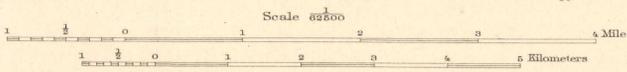
■ Coal-mine shaft
● Coal test boring
○ Well drilled for oil or gas

Note: The most valuable coal, Herrin (No. 6) at the top of the Carbonate formation, underlies the McLeansboro formation throughout the quadrangle except in certain recessed areas where it was locally eroded away after the deposition of the coal. Other coals occur in the Carbonate and McLeansboro formations; shale for brick and tile and limestone for cement materials and building stone occur in the McLeansboro formation; gumbo and glacial till yield clay for brick and the alluvium and morainal drift locally carry sand and gravel; oil and gas in small quantities have been obtained in limited areas.

R. B. Marshall, Chief Geographer.
W. H. Herron, Geographer in charge.
Topography by Frank Tweedy, C. W. Goodlove,
L. L. Lee, and R. M. Herrington.
Control by J. H. Wilson and R. G. Clinite.
Surveyed in 1912.

SURVEYED IN COOPERATION WITH THE STATE OF ILLINOIS.

APPROXIMATE MEAN
EQUINOXIAL 1914.



Geology by Wallace Lee.
Surveyed in 1914.

SURVEYED IN COOPERATION
WITH THE STATE OF ILLINOIS.