AREAL GEOLOGY

STATE OF ILLINOIS
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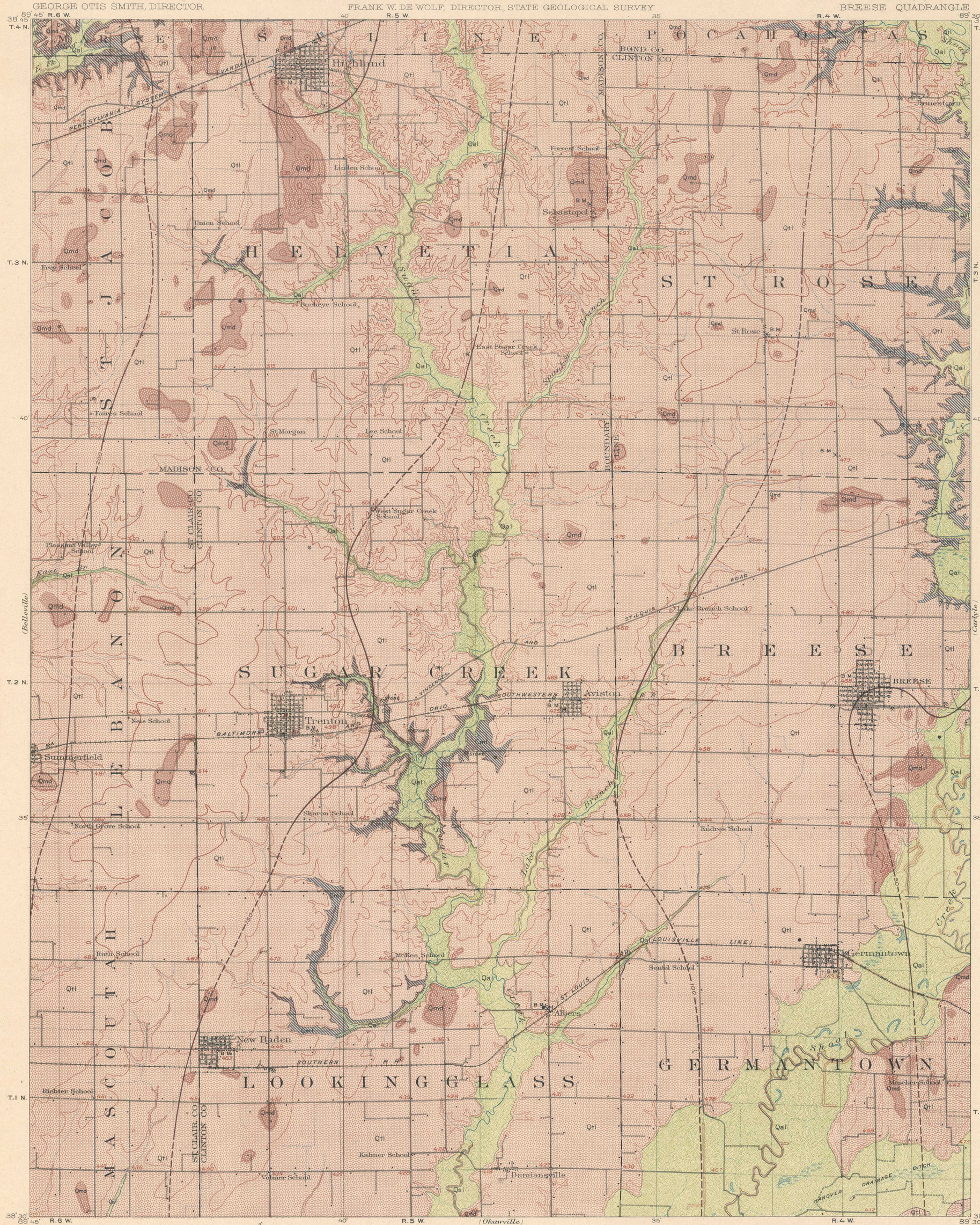
ILLINOIS
BREESE QUADRANGLE



LEGEND

SEDIMENTARY ROCKS

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

QUATERNARY

Recent

Qal — **Alluvium**
(in flood plains of present streams, upper part generally fine silt, lower part sandy or gravelly; in lower Sugar Creek and Shoal Creek valleys includes lake and sluggish stream deposits)

Pleistocene — Illinoian stage

Qtl — **Glacial till overlain by loess**
(gravelly and sandy clay generally overlain by buff to grey loess; near the larger streams the material is partly sorted by water)

Qmd — **Morainal drift**
(hills of gravelly and sandy clay with some lenses of clean sand and gravel, mantled with loess)

CARBONIFEROUS

Pennsylvanian

Pmc — **McLeansboro formation**
(generally soft shale and sandstone with some limestone and thin beds of coal, underlies all Quaternary deposits in the quadrangle)

ECONOMIC AND STRUCTURE DATA

150 — *Structure contours on the base of Herrin (No.6) coal (doubtful portion of coal indicated by dashed lines; contour interval, 50 feet; datum, mean sea level)*

- Coal mines
- Abandoned coal mines
- Coal test borings
- Deep wells
- STONE Quarries

Note: *The most valuable coal, Herrin (No.6) at the top of the Carbondale formation, lies 50 to 400 feet below the surface, other coals occur in the Carbondale and McLeansboro formations; shale for brick and tile, and limestone for cement materials and building stone occur in the McLeansboro formation, loess and glacial till yield clay for brick and tile, alluvium and morainal drift locally carry sand and gravel. The Herrin coal is known in the region of the Belleville and Breese quadrangles as the Belleville bed.*

H.M. Wilson, Geographer.
W.H. Herron, in charge of section.
Topography by C.L. Sadler.
Control by J.R. Ellis.
Surveyed in 1906.

SURVEYED IN COOPERATION WITH THE STATE OF ILLINOIS.

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION 1906.

Scale 1/62500
1 0 1 2 3 4 Miles
1 0 1 2 3 4 5 Kilometers

Contour interval 20 feet.
Datum is mean sea level.

Edition of May 1913.

DIAGRAM OF TOWNSHIP

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Geology by J.A. Udden, assisted by I.J. Broman.
Surveyed in 1907.

SURVEYED BY THE STATE OF ILLINOIS.