

AREAL GEOLOGY

U.S. GEOLOGICAL SURVEY
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PENNSYLVANIA-DELAWARE-NEW JERSEY
CHESTER QUADRANGLE

LEGEND

SEDIMENTARY ROCKS

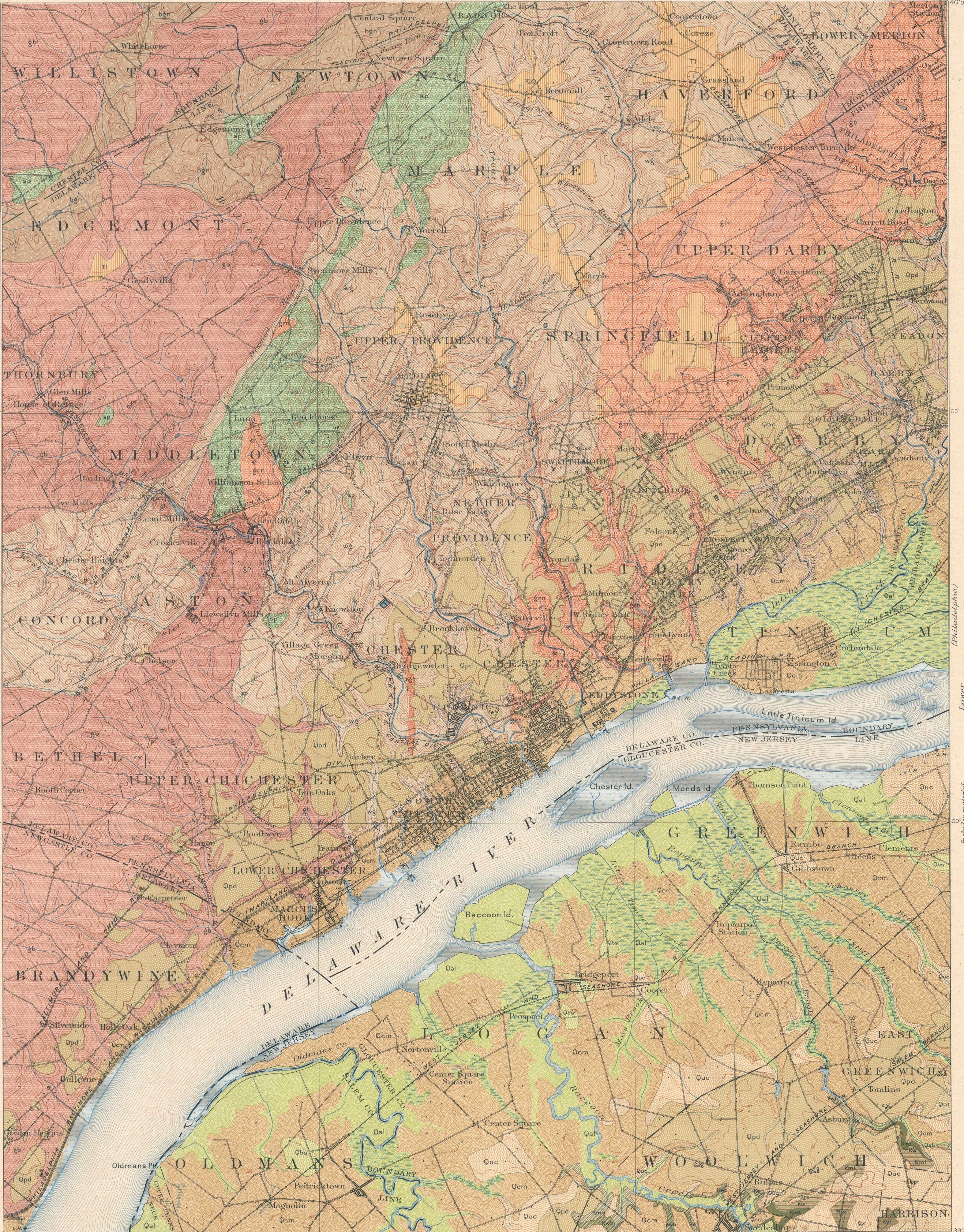
Areas of analogous deposits are shown by patterns of parallel lines; substantial deposits by patterns of dots and circles; metamorphism is indicated by hachures combined with the line patterns.

- | | | | | |
|-------------------------|-----|--|--------------------|----------|
| Recent | Qal | Alluvium and marsh muck
<i>(subl. flats not included)</i> | | |
| | Qbs | Wind blown sand | | |
| | Quc | Unclassified deposits
<i>(gravel, sand, and loam of various sizes usually fine and discontinuous with occasional masses of older formations)</i> | UNCONFORMITY | |
| Quaternary | Qcm | Cape May formation
<i>(sand and gravel, chiefly on terraces)</i> | UNCONFORMITY | |
| | Opa | Pensauken formation
<i>(Delaware River phase Opa; tributary valley phase Opi; possibly includes material of slightly different age)</i> | UNCONFORMITY | |
| | Tt | Lafayette formation
<i>(loam, clay, sand, and gravel)</i> | UNCONFORMITY | Tertiary |
| Cretaceous | Kml | Mount Laurel and Wrennah sands
<i>(reddish brown, and yellow quartz sand, upper portion mostly and coarse, lower portion fine and micaceous and contains a different fauna, but not separated on map)</i> | | |
| | Kmt | Marshalltown formation
<i>(black sandy clay and sandy marl)</i> | | |
| | Kc | Englishtown sand
<i>(fine gravel and slightly lignitic, with occasional thin clay lenses)</i> | | |
| | Kwb | Woodbury clay
<i>(black to dove-colored clay, usually nonplastic)</i> | | |
| | Kmw | Merchantville clay
<i>(black sandy clay, usually plastic)</i> | SEQUENCE CONCEALED | |
| | Kpt | Patuxent formation
<i>(highly colored clay)</i> | UNCONFORMITY | |
| Pre-Cambrian | bgn | Wissahickon gneiss
<i>(banded quartz-feldspar-mica rock with garnet, orthopyroxene, and amphibole)</i> | | |
| | bgm | Baltimore gneiss
<i>(banded quartz-feldspar rock containing hornblende or biotite, in part massive igneous)</i> | | |
| Ordovician or younger | pt | Pegmatite
<i>(quartz-feldspar-mica vein rock)</i> | | |
| | mg | Metagabbro
<i>(masses of fine grained hornblende-labradorite rock closely related to the gabbro)</i> | | |
| Early Cambrian or older | sp | Metapyroxenite and metaperidotite
<i>(serpentine, staurolite, and associated alteration products)</i> | | |
| | gb | Gabbro
<i>(quartz gabbro, hypersthene gabbro, and horn)</i> | | |
| | hgn | Hornblende gneiss
<i>(hornblende-labradorite rock)</i> | | |
| | gn | Granite gneiss
<i>(quartz-mica-biotite hornblende rock)</i> | | |

1,00' Strikes and dip of sedimentary rocks
Stops of vertical beds

Economic data
Quarries in part abandoned
✓ chiefly building stone and road material;
✗ fieldstone;
✗ Pits in unconsolidated deposits
s, sand; g, gravel; cl, clay

Note: Building stone can be obtained from bgn, gn, sp, hgn, gb, and wg road material from bgn, sp, gn, mg, gb, Opa, and Opi occur from sp, feldspar for pottery from pt, clay for bricks from hgn, kmw, Kwb, and Kc, gravel for concrete and building purposes from Opa, Opi, and Ocm, sand for building and moulding purposes from Kc, Kml, Opa, Opi, Ocm, and Qbs, marl for fertilizer from Kmt.



Henry Gannett, Chief Topographer
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Triangulation by U.S. Coast and Geodetic Survey
Topography by Frank Sutton, R.D. Cummins, Robt. Muldrow,
E.B. Clark, and Geological Survey of New Jersey.
Surveyed in 1894.

Scale 62500
Miles
Kilometers

Contour interval 20 feet.
Datum is mean sea level.
Edition of Sept. 1908.

Geology of the pre-Cretaceous by F. Bascom,
Cretaceous by W.B. Clark, G.N. Knapp, B.L. Miller, and A. Bibbins,
Tertiary by E.L. Miller,
Quaternary of New Jersey by G.N. Knapp.
Surveyed in 1894-1907.
SURVEYED IN COOPERATION WITH THE STATE OF NEW JERSEY.