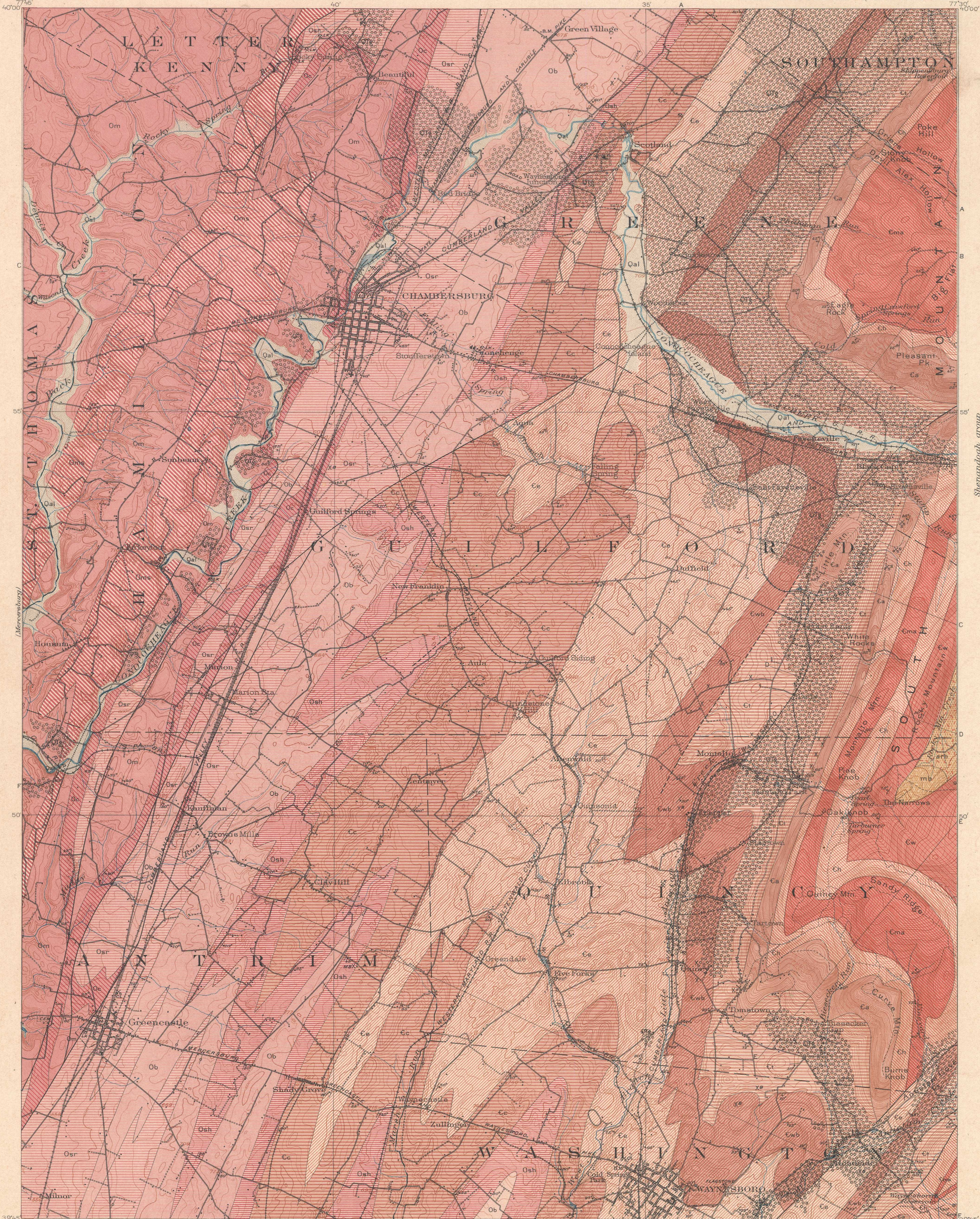


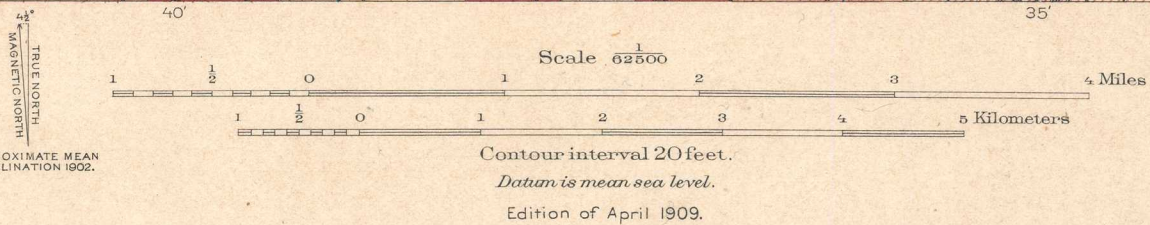
AREAL GEOLOGY

LEGEND



- SEDIMENTARY ROCKS**
 (Areas of extensive deposits are shown by patterns of parallel lines, scattered deposits by patterns of dots and circles)
- QUATERNARY**
- Qal Alluvium (gravel and silt in valley bottoms)
 - Ob Terrace gravels and wash (coarse gravel and sand on stream terraces and at the foot of mountain slopes)
- TERTIARY**
- Om Martinsburg shale (black fissile shale and soft greenish argillaceous sandstone, lower sandstone beds, Om, at the top)
- ORDOVICIAN**
- Oc Chambersburg limestone (rather pure thin bedded fossiliferous limestone with crystalline partings)
 - Oar Stones River limestone (very pure even-grained limestone with some magnesian beds)
 - Ob Beekmantown limestone (interbedded pure and magnesian limestones, at the base siliceous banded and conglomeratic Stenshagen member, Ob)
- Shenandoah group**
- Cc Conococheague limestone (dense dark limestone with numerous contorted sandy laminae at the base, very sandy beds with limestone conglomerate and chert)
 - Ca Ellbrook formation (light gray shaly limestone and calcareous shale, with a few thick limestone beds)
 - Ewb Waynesboro formation (shaly sandstone, hard purple sandy shale and limestone)
- Devonian series**
- Cr Tomstown limestone (massive and thin-bedded limestone and shale)
- CAMBRIAN**
- Ca Antietam sandstone (coarse white sandstone and quartzite)
 - Ch Harpers schist and Monticello quartzite member (dark banded slate or schist, with massive hard white quartzite member)
 - Cw Weverton sandstone (gray bituminous sandstone and purplish quartz conglomerate)
- IGNEOUS ROCKS**
 (Areas of igneous rocks are shown by patterns of triangles and rhombs; metamorphism is indicated by hachures)
- PRE-CAMBRIAN**
- apb Aporhyolite (divided rhyolite lava, chiefly red or purple)
 - mb Metabasalt (basalt flows altered to greenstone)
- Faults**
- Concealed faults (covered by surficial deposits)
 - Strike and dip of stratified rocks
 - Strike of vertical strata
 - Horizontal strata
- Other symbols:**
- Quarries, chiefly limestone for foundations, flagstones, and road material
 - Quarries with limonite only the larger ones shown
 - Abandoned iron mines and prospects
 - Abandoned barite mines and prospects
 - Marble prospect
 - Sand pits
 - Clay pits and brick kilns

H. M. Wilson, Geographer in charge.
 Triangulation by Sledge Tatum.
 Topography by Robt. D. Cummin and Second Geol. Survey of Pa.
 Surveyed in 1900 in cooperation with the State of Pennsylvania.



Geology by George W. Stose.
 Surveyed in 1901-07.

Economic data. Lime for plaster can be obtained from Cr lime for fertilizer chiefly from Cr, Ob, Oc, and Ca cement materials from Cr, Oc, and Om road material from Cr, Oc, and Om flagstones from Cr and Oc building and foundation stone from limestones of the Shenandoah group Om, and Ca shale and clay from Cr, Om, and residuum from weathered limestones building sand from Ca, Cr, and Qal iron ore from wash overlying Cr and Ewb, Cr, Ca, Ob, Cr, and Oc furnish the best soils for farm land Cr, Ca, Om, and slopes of mountains mantled by wash furnish poorer soils adapted for fruit culture, farming, and grazing, mountain areas, mantled largely by sandstone debris, adapted chiefly to woodland, grazing, and fruit culture.