

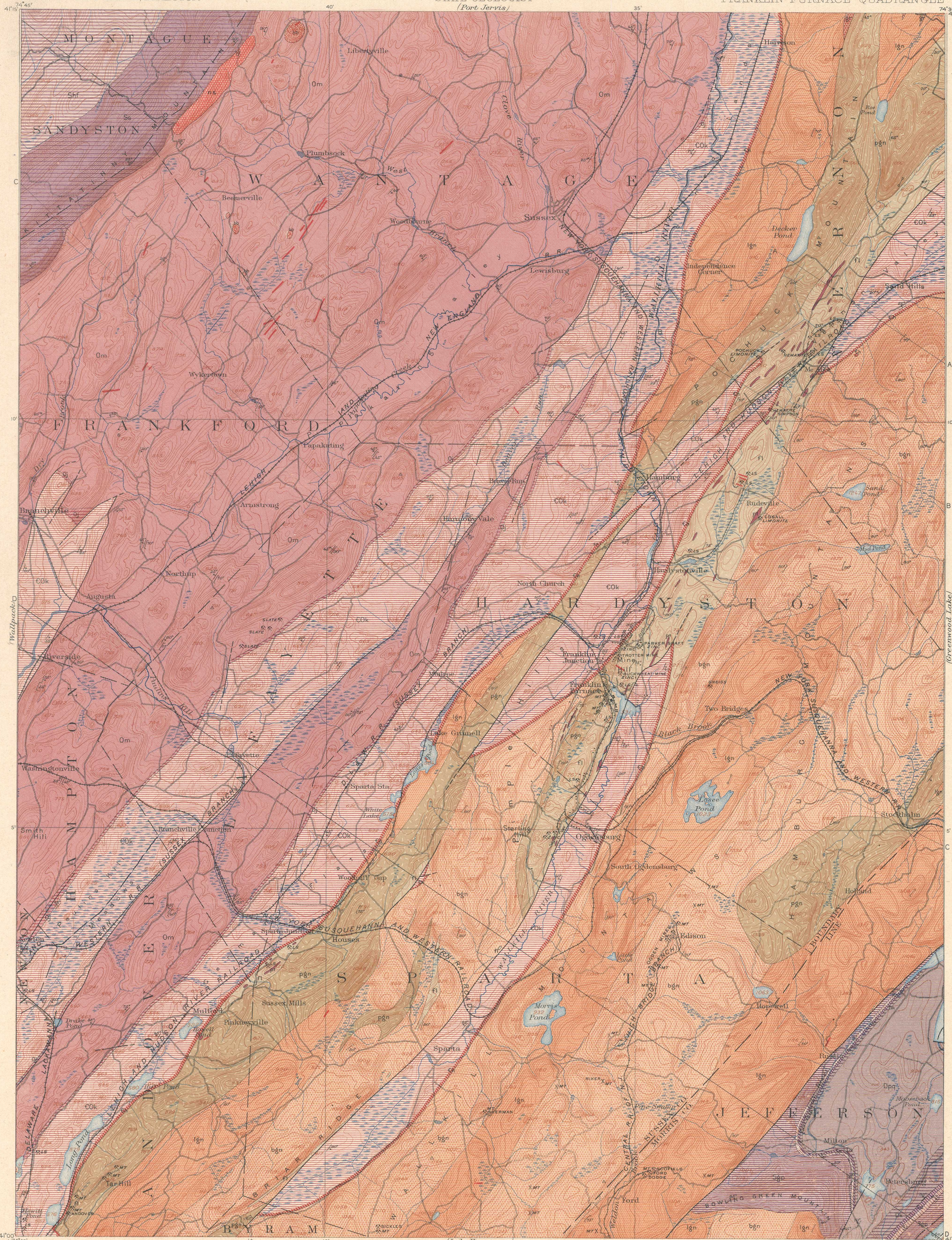
# AREAL GEOLOGY

U.S. GEOLOGICAL SURVEY  
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STATE OF NEW JERSEY  
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(Part Jersey)

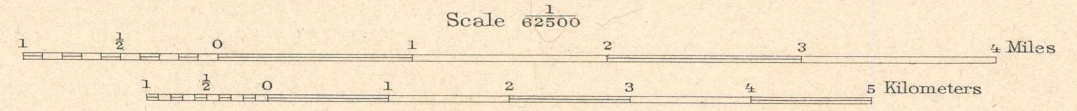
NEW JERSEY  
FRANKLIN FURNACE QUADRANGLE

## LEGEND



- SEDIMENTARY ROCKS**  
(Areas of subaqueous deposits are shown by patterns of parallel lines)
- Dpq** Pequanac shale (black fissile shale or slate) DEVONIAN
  - Dk** Kanouse sandstone (light-colored sandstone or quartzite)
  - Sd** Decker limestone (dark gray impure limestone)
  - Shf** High Falls formation (red sandstone and shale) SILURIAN
  - Sl** Longwood shale (red shale)
  - Sa** Shawangunk conglomerate (white quartzitic conglomerate and quartzite)
  - Sgp** Green Pond conglomerate (white quartzitic conglomerate and quartzite)
- UNCONFORMITY**
- Om** Martinsburg shale (Baldon shale, shale, slate, and sandstone) ORDOVICIAN
  - Oj** Jacksonburg limestone (Fenton limestone, dark blue or black massive and shaly limestone, cement rock, with limestone conglomerate at base)
  - Ek** Kittatiny limestone (blue limestone, often impure, with some usual cherty layers) CAMBRIAN
  - Ch** Hardyston quartzite (vitreous, ferruginous, calcareous, and in part foliaceous)
- UNCONFORMITY**
- f** Franklin limestone (coarsely crystalline, rough foliated, white limestone, marble, containing greenish, cherty, druse, pyrochroite, and other accessory minerals) PRE-CAMBRIAN
- Metamorphic**
- IGNEOUS ROCKS**  
(Areas of igneous rocks are shown by patterns of triangles and rhombs)
- Dikes** (mostly basic, including nephelites, ringwoodite, basalt, trachyte, and andesite)
  - bb** Basic breccia (massive, including numerous fragments of blue limestone and quartz, filling old volcanic rocks)
  - ns** Nephelite syenite (intrusive mass of gray coarse to fine-grained rock)
  - Pg** Pegmatite (coarse, obscurely foliated granitic gneiss, quartz and feldspar)
  - gr** Granite (coarse grained, rarely foliated, hornblende granite, rich in zircon, titanite, and allanite)
  - bgn** Byram gneiss (gray granitic gneiss, composed of microcline, muscovite, quartz, hornblende, pyrochroite, and sometimes mica)
  - lgn** Losee gneiss (white granitic gneiss, composed of oligoclase, quartz, and occasional hornblende and pyrochroite)
- METAMORPHIC ROCKS OF UNKNOWN ORIGIN**  
(Areas of metamorphic rocks of unknown origin are shown by patterns of short dashes)
- pgn** Pochuck gneiss (dark granitic gneiss, composed of hornblende, pyrochroite, oligoclase, and magnetite) PRE-CAMBRIAN
- Faults**
- 60°** Strike and dip of sedimentary rocks
  - 8** Strike of vertical beds
  - 8** Horizontal stratified rocks
  - 8** Strike and dip of foliation or cleavage
  - 8** Strike of vertical foliation or cleavage
  - x** Quarries and mines
  - x** Prospects
  - MT** Magnetite
  - LS** Limestone

Triangulation by the U.S. Coast and Geodetic Survey.  
Topography by the Geological Survey of New Jersey.  
Surveyed in 1884.



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

Geology by Henry B. Kümmel,  
Arthur C. Spencer, and Stuart Weller.  
Surveyed in 1882-1891 and 1905.

SURVEYED IN COOPERATION WITH THE STATE OF NEW JERSEY.