

EXPLANATION

- UPPER PENNSYLVANIAN**
- LLEWELLYN FORMATION**
Light-gray to dark-gray shale, sandstone, conglomerate, carbonaceous shale, and coal.
Small to moderate yields of water. In the vicinity of coal measures water is usually acid. Well yields range from 2 to 50 gpm (gallons per minute), 0.13 to 3.2 l/s (liters per second).
- LOWER PENNSYLVANIAN**
- POTTSVILLE FORMATION**
Fine to coarse conglomerate, fine- to coarse-grained sandstone, siltstone, and thin shale and coal beds.
Moderate yield from this formation except near outcrops on the high ridges. Well yields range from 5 to 150 gpm (0.32 to 9.5 l/s).
- UPPER MISSISSIPPIAN**
- MAUCH CHUNK FORMATION**
Shale, siltstone, and fine- to coarse-grained sandstone. Chiefly reddish to greenish shale predominates over lighter colored rock.
Best producing zones are in the sandstone members but some water is obtained from fractures in shale beds. Well yields range from 5 to 250 gpm (0.32 to 16 l/s). Deeper wells in this formation usually have higher yields.
- LOWER MISSISSIPPIAN**
- POCONO FORMATION**
Yellowish-gray to almost white, medium- to very coarse grained sandstone, conglomerate, and some shale.
Ground water moves through interconnected joints and fractures. Well yields range from 3 to 133 gpm (0.19 to 8.4 l/s).
- UPPER DEVONIAN**
- CATSKILL FORMATION**
Shale, claystone, siltstone, sandstone, and conglomerate. Finer grained rock predominates in the lower half.
Water is found in both primary and secondary openings in the formation. Well yields range from 2 to 325 gpm (0.13 to 21 l/s).
- MIDDLE DEVONIAN**
- MARINE BEDS**
Gray to brown shales, graywackes, and sandstone.
Most ground water moves through fractures and joints. Well yields range from 1 to 40 gpm (0.06 to 2.5 l/s).
- HAMILTON GROUP**
Brown to gray sandy shale.
Rocks are well cemented, and ground water moves only through secondary openings. Very low well yields range from less than 1 to 9 gpm (0.06 to 0.57 l/s).

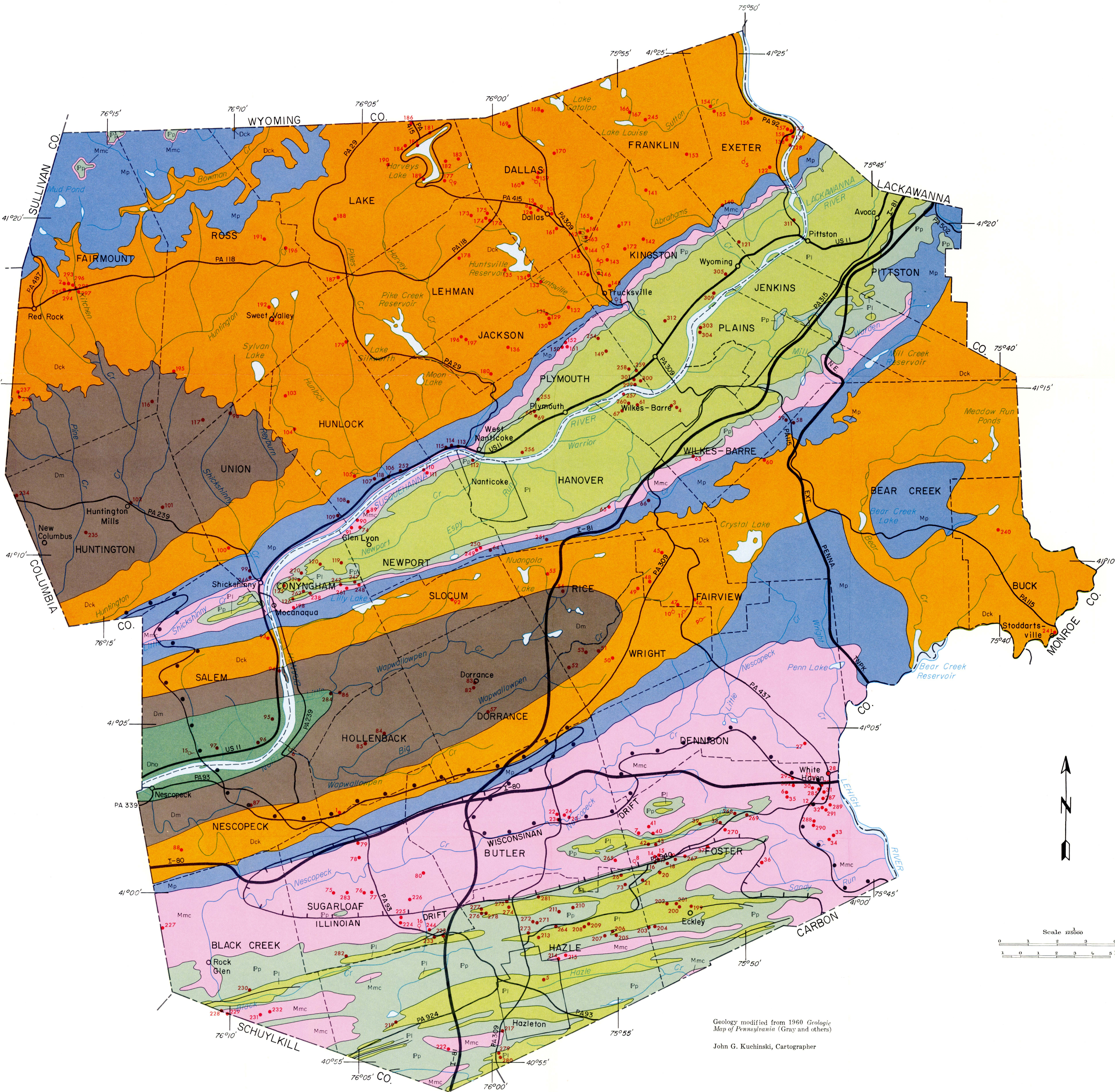
SYMBOLS

Well and number
(Number refers to Tables 3, 4, and 5)

Spring and number

Contact

Fault



Geology modified from 1960 *Geologic Map of Pennsylvania* (Gray and others)
John G. Kuchinski, Cartographer

GEOLOGIC MAP OF LUZERNE COUNTY SHOWING
LOCATIONS OF SELECTED WELLS AND SPRINGS

1977