



GEOLOGIC MAP OF LANCASTER COUNTY, PENNSYLVANIA, SHOWING LOCATIONS OF WELLS

BY CHARLES W. POTH

1977

EXPLANATION

- DIABASE**
Dark fine- to coarse-grained igneous rock.
Reported yields range from 3 to 15 gpm (0.19 to 0.95 l/s); the median is 10 gpm (0.63 l/s). Large yields are sometimes obtained from fractured, baked rock adjacent to diabase. The water is moderately hard.
- GETTYSBURG-HAMMER CREEK FORMATION**
Tgh, red shale and soft red sandstone. kcc, quartz conglomerate; klc, limestone conglomerate. Reported yields range from 5 to 94 gpm (0.32 to 5.9 l/s); the median is 16 gpm (1 l/s). The water is generally soft.
- NEW OXFORD-STOCKTON FORMATION**
Light-gray to yellowish-gray sandstone with interbedded thin red shale and conglomerate. Reported yields range from 1 to 450 gpm (0.06 to 28.4 l/s); the median is 12 gpm (0.76 l/s). Specific capacities range from 0.1 to 21 gpm/ft (0.02 to 4.3 l/s/m); the median is 0.83 gpm/ft (0.17 l/s/m). The water is generally soft to moderately hard.
- COCALICO FORMATION**
Bluish-black to dark-gray, fissile shale. Reported yields range from 1 to 100 gpm (0.06 to 6.3 l/s); the median is 20 gpm (1.3 l/s). The water is moderately hard.
- CONESTOGA FORMATION**
Gray fine- to coarse-crystalline limestone; contains clayey, graphitic, and micaceous laminae. Specific capacities range from 0.02 to 130 gpm/ft (0.004 to 27 l/s/m); the median is 2.2 gpm/ft (0.46 l/s/m). The water is very hard.
- BEEKMANTOWN GROUP**
Light- to dark-gray, very fine to coarse-crystalline limestone, overlain by interbedded limestone and dolomite, very fine crystalline dolomite, and finally by limestone. Reported yields range from 1 to 600 gpm (0.06 to 38 l/s); the median is 30 gpm (1.9 l/s). Specific capacities range from 0.03 to 600 gpm/ft (0.01 to 128 l/s/m); the median is 1.5 gpm/ft (0.31 l/s/m). The water is very hard.
- CONOCOCHIEGUE GROUP**
White to dark-gray, very fine to fine-crystalline, interbedded limestone and dolomite; much of the dolomite is clayey to sandy. Reported yields range from less than 2 to 30 gpm (0.13 to 1.9 l/s); the median is 12 gpm (0.76 l/s). Specific capacities range from 0.02 to 244 gpm/ft (0.004 to 50 l/s/m); the median is 0.2 gpm/ft (0.04 l/s/m). The water is very hard.
- ELBROOK-ZOOKS CORNER FORMATION**
Medium-gray, very fine crystalline, thin- to thick-bedded dolomite; much silty to sandy dolomite interbedded with dolomitic sandstones. Reported yields range from 3 to 105 gpm (0.19 to 6.6 l/s); the median is 20 gpm (1.3 l/s). Specific capacities range from 0.04 to 46 gpm/ft (0.01 to 9.5 l/s/m); the median is 0.1 gpm/ft (0.02 l/s/m). The water is very hard.
- LEDGER FORMATION**
Light-gray, medium- to coarse-crystalline, massive dolomite. Reported yields range from 2 to 550 gpm (0.13 to 35 l/s); the median is 30 gpm (1.9 l/s). Specific capacities range from 0.16 to 135 gpm/ft (0.03 to 28 l/s/m); the median is 2.5 gpm/ft (0.52 l/s/m). The water is very hard.
- KINZERS FORMATION**
Gray shale; contains beds of limestone and dolomite that may be clayey to sandy or contain pyritiferous black shale partings. Reported yields range from 2 to 30 gpm (0.13 to 1.9 l/s); the median is 17 gpm (1.1 l/s). Specific capacities range from 0.05 to 38 gpm/ft (0.01 to 7.9 l/s/m); the median is 1.8 gpm/ft (0.37 l/s/m). The water is very hard.
- VINTAGE FORMATION**
Gray fine-crystalline massive dolomite; contains siliceous laminae or thin shale interbeds. Reported yields range from 2 to 70 gpm (0.13 to 4.4 l/s); the median is 6 gpm (0.38 l/s). Specific capacities range from 0.03 to 74 gpm/ft (0.01 to 15 l/s/m); the median is 0.44 gpm/ft (0.09 l/s/m). The water is hard to very hard.
- ANTIETAM AND HARPERS FORMATIONS, UNDIVIDED**
Gray quartzite overlying gray phyllite and schist. Reported yields range from 1.5 to 40 gpm (0.09 to 2.5 l/s); the median is 5 gpm (0.32 l/s). The water is soft.
- CHICKIES FORMATION**
Light-colored thick-bedded vitreous quartzite; thin bedded in upper part; contains basal conglomerate. Reported yields range from 1 to 30 gpm (0.06 to 1.9 l/s); the median is 6 gpm (0.38 l/s). The water is soft.
- PETERS CREEK SCHIST**
Greenish-gray chloritic, micaceous quartzite and schist; includes the Peach Bottom Slate (Xpb). Reported yields range from 1 to 40 gpm (0.06 to 2.5 l/s); the median is 10 gpm (0.63 l/s). The water is soft.
- WISSAHICKON FORMATION**
Gray to green albite-chlorite schist. Reported yields range from 2 to 35 gpm (0.13 to 2.2 l/s); the median is 5 gpm (0.32 l/s). The water is soft.
- SERPENTINITE**
Light- to dark-green, sometimes reddish, iron-magnesium silicate rock. Reported yields range from 3 to 10 gpm (0.19 to 0.63 l/s); the median is 5 gpm (0.32 l/s). The water is soft.
- METAMORPHIC AND IGNEOUS ROCKS**
Includes Xmg, metagabbro; Xpg, pegmatite; g, gabbroic gneiss and gabbro; gd, grano-diorite; gg, graphitic gneiss; gn, granite gneiss; ng, hornblende gneiss; and qm, quartz monzonite. Reported yields range from 2 to 70 gpm (0.13 to 4.4 l/s); the median is 10 gpm (0.63 l/s). The water is soft.

*The small portions of Cambrian Hardyston Formation (Cha) and Ordovician Martinsburg Formation (Om) in the northernmost part of the county were not studied or differentiated by color.