

		UNIT	GEOLOGIC DESCRIPTION	WELL YIELDS	QUALITY OF WATER	
DEVONIAN	CATSKILL FORMATION Dck	SHERMAN CREEK MEMBER Dsc	Grayish-red sandstone, siltstone, and shale with some gray sandstone and conglomerate; sandstone layers are generally fine grained and thick bedded.	Reported well yields range from 0 to 250 gal/min; the medians are 10 and 30 gal/min for domestic and nondomestic wells, respectively.	Water is soft to moderately hard and has a moderate amount of dissolved solids; more than 25 percent of the wells produce water high in iron and manganese.	
		IRISH VALLEY MEMBER Dciv				
		LOCK HAVEN FORMATION Dih	Light-olive-gray interbedded sandstone, siltstone, and shale; a few beds of conglomerate occur near the top.	Reported well yields range from 1 to 600 gal/min; the medians for domestic and nondomestic wells are 8 and 25 gal/min, respectively.	Water is moderately hard and relatively high in dissolved solids; about half of the wells produce water high in iron and manganese.	
		BRALLIER AND HARRELL FORMATIONS, UNDIVIDED Dbh	Brallier Formation—Interbedded light-olive-gray shale and siltstone and some sandstone. Harrell Formation—Dark-gray to black shale; generally very fissile.	Reported well yields range from 1 to 60 gal/min; the medians are 5 and 30 gal/min for domestic and nondomestic wells, respectively.	Water is soft; contains a moderate amount of dissolved solids; many supplies contain high iron and manganese and occasionally hydrogen sulfide.	
		TRIMMERS ROCK FORMATION Dtr	Interbedded medium-gray to olive-gray siltstone, shaly siltstone, and shale.	Reported yields range from 1 to 183 gal/min and the median is 5 gal/min.	Water is soft to moderately hard and relatively low in dissolved solids.	
		HAMILTON GROUP Dh	Includes the Mahantango and Marcellus Formations. Mahantango Formation—Medium to dark-gray shale with minor amounts of siltstone and limestone. Marcellus Formation—Dark-gray to black shale.	Reported well yields range from 1 to 240 gal/min; the medians are 10 gal/min for domestic wells and 30 gal/min for nondomestic wells.	Water is moderately hard and relatively high in dissolved solids; some wells produce water high in iron, manganese, and, less often, hydrogen sulfide.	
		ONONDAGA AND OLD PORT FORMATIONS, UNDIVIDED Doo	Onondaga Formation—Interbedded dark-to-light-gray shale and argillaceous limestone. Old Port Formation—Gray limestone containing chert; calcareous shale; and medium-to coarse-grained, white, calcareous sandstone.	Reported well yields range from 2 to 500 gal/min; the median yields are 20 and 89 gal/min for domestic and nondomestic wells, respectively.	Water is hard and contains a moderate amount of dissolved solids.	
	SILURIAN	DSc DStm	KEYSER AND TONOLOWAY FORMATIONS, UNDIVIDED DSkt	Keyser Formation—Medium gray nodular limestone overlain by argillaceous limestone and dolomite. Tonoloway Formation—Laminated and thin- to medium-bedded, gray limestone.	Reported yields range from 4 to 460 gal/min; the median for domestic wells is 20 gal/min and the median for nondomestic wells is 80 gal/min.	Water is very hard and moderately high in dissolved solids.
			WILLS CREEK FORMATION Swc	Medium-light-gray calcareous shale and siltstone; interbeds of grayish-red calcareous siltstone occur in lower part.	Reported well yields range from 6 to 130 gal/min; the medians of domestic and nondomestic wells are 12 and 60 gal/min, respectively.	Water is very hard and moderately high in dissolved solids.
			BLOOMSBURG AND MIFFLINTOWN FORMATIONS, UNDIVIDED Sbm	Bloomsburg Formation—Grayish-red siltstone and claystone with some interbeds of fine-grained sandstone and algal limestone. Mifflintown Formation—Thin- to medium-bedded gray limestone and interbedded calcareous shale.	Reported yields range from 3 to 300 gal/min; the medians are 11 gal/min for domestic wells and 100 gal/min for nondomestic wells.	Water is hard and contains a moderate amount of dissolved solids.
CLINTON GROUP Sc			Light-olive-gray to brownish-gray shale with some interbedded siltstone and sandstone.	Reported well yields range from 1 to 60 gal/min; the median for all wells is 10 gal/min.	Water is soft to moderately hard and low in dissolved solids.	
ORDOVICIAN		TUSCARORA FORMATION St	Tuscarora Formation—Fine- to coarse-grained, medium to thick-bedded, white quartzite.			
		JUNIATA FORMATION Oj	Juniata Formation—Grayish-red quartzose sandstone and interbedded siltstone and fine-grained sandstone.	Reported well yields range from 1 to 100 gal/min; the median for all wells is 11 gal/min.	Water is soft to moderately hard and low in dissolved solids.	
		BALD EAGLE FORMATION Obe	Bald Eagle Formation—Gray to greenish-gray, fine- to coarse-grained sandstone.			
		REEDSVILLE FORMATION Or	Medium-gray, thin- to medium-bedded silty shales and shaly siltstones; few interbeds of very fine grained sandstone.	Median yield, based on a limited amount of data, is 10 gal/min; yields range from 1 to 50 gal/min.	Water is hard and contains a moderate amount of dissolved solids; excessive iron, manganese, and hydrogen sulfide are common problems.	

Stratigraphic Column and
Water Producing Capability
Summary for Union County.

Source: Taylor, et. al., 1983.