	10 III (100 to 200 It).		
MIDDLE DEV	Homogeneous, slightly silty shale, dark-gray to black. The shale is very thick bedded, very fissile, and carbonaceous, and contains scattered large siderite concretions. Forms undulating hills of moderately low relief; moderate to gentle natural slopes; surface drainage good, dendritic, and moderately dense. Low resistance to weathering; weathered mantle moderate to thick. Thickness: 105 to 150 m (345 to 490 ft).	MARCELLUS FORMATION Omr	Groundwater quality probably good, but may contain sulfide; median well yield is 7 gpm (0.4 l/s). Fractures are fairly well developed and have moderate to wide spacing. Excavation moderately easy; cut-slope stability fair; foundation stability good. Excellent source for road material, general fill, and tripoli.
	Interbedded calcareous and noncalcareous shales in the lower part, medium-dark-gray. The shales are very thick bedded, moderately fissile, and contain a few interbeds of limestone. Limestones and argillaceous limestones in the upper part, medium-dark-gray. The limestones are medium bedded, homogeneous or laminated, and have some thin interbeds of calcareous fissile shales. Forms rolling terrain of moderately low relief; moderate to gentle natural slopes; surface drainage fair, dendritic, and moderately dense; possibly some subsurface drainage. Low resistance to chemical weathering; weathered mantle moderate to thick. Thickness: 30 m (100 ft).	ONONDAGA FORMATION Don	Groundwater quality fair, may contain sulfide; median well yield is 20 gpm (1.3 l/s). Fractures are well developed and have close to moderate spacing. Excavation difficult, minor blasting required; cut-slope stability good; foundation stability good; possibly some sinkholes and pinnacles. Not a good source for any general use.
LOWER DEVONIAN	Interbedded sandstone, limestone, cherty limestone, and shale. Ridgeley Member consists of sandstones, medium-grained, fossiliferous, medium- to thick-bedded, white to tan, and friable; makes up from 50 percent of formation at Montoursville to 10 percent at Pennsdale. The limestones are thin to thick bedded, medium gray, and cherty in part. The shales are dark gray to black, rather fissile, fossiliferous, and medium to very thick bedded, laterally replacing the sandstones where they are absent. Forms moderately low ridges having low relief; gentle to moderate natural slopes; surface drainage fair, dendritic, and of low density; possibly some subsurface drainage. Low to moderate resistance to weathering; weathered mantle moderate to thick. Thickness: 150 m (490 ft).	OLD PORT FORMATION Do	Groundwater quality fair to good; median well yield is 20 gpm (1.3 l/s). Fractures are fairly well to well developed and have moderate to wide spacing. Excavation moderate to difficult, minor blasting usually required; cut-slope stability fair to good; foundation stability good. Good source for glass sand.