SURFICAL GEOLOGIC MAP PECATONICA QUADRANGLE, WINNEBAGO COUNTY, ILLINOIS

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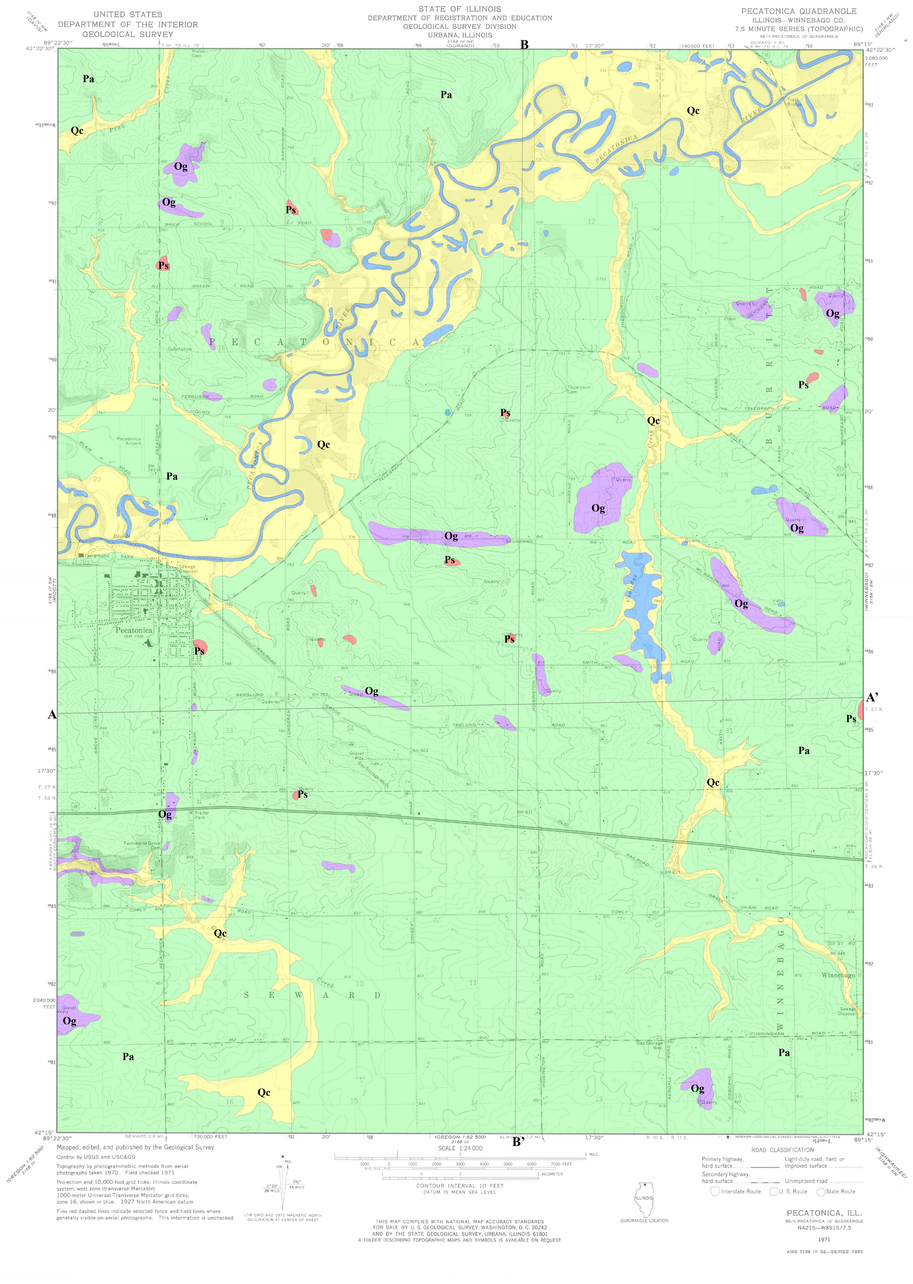

Lithostratigraphic Units and Interpretations

Description	Stratigraphic Unit		Interpretations
Holocene Series	Cahokia Formation		
Mainly silt and clay with some sand lenses; brown to tan brown in color. Crudely Stratified.		Qc	Modern alluvial and flood plain deposits; locally overlie lacustrine deposits or till. the unit contains silts, clay, and silty sand.
Pleistocene Series Wisconsin Stage	Peoria Loess		
1-1.5 meters of discontinuous massive units of loess consist of fine, red to light brown, well sorted silts with some clay and sand. The Peoria Loess unit is discontinuous throughout the area which could be due to erosion and agricultural use within the quadrangle. The Peoria Loess is locally calcerous. The Argyle till member underlain the Peoria Loess occasionally; however, the unit overlay bedrock in local areas.		Ps	Windblown deposits of silt, clay, and fine sand. Its is likely the entire quadrangle was blanketed with the silt deposit; however, years of agriculture use and erosion leave discontinuous sections of the Peoria Loess thorough out the area.
Illinois Stage	Argyle Till Member		
1-10 meters of the Argyle Till member was found in the Pecatonica Quadrangle. The Diamicton is very sandy, brown to pinkish tan in color. the unit is massive, calcerous, and contains discontinous beds of sands and gravels.		Pa	Diamicton units containing silt, clay, and sand and gravel deposited by glacial ice. Where present overlies bedrock.
Ordovician Series	Galena-Platteville		
Collectively this group is more than 100 m (320 ft) in thickness and consist of layers of dolostone. The dolostone ranges from coarsely fossiliferous to fine grained, and is locally cherty and/or heavily bioturbated. Most of the dolostone is fine to medium grained and have undergone various degrees of recrystallization.		Og	Fossiliferous limestone and dolomite deposted from remains of marine organisms that lived in a warm shallow sea. Later in the Ordovician, the epic-continental sea recrystallized the unit which generated cherty dolomite layers within the Dolomite.
	Ancell Group: St. Peter Sandstone		
The St. Peter Sandstone is a member of the Ancell Group and is as much as 122 m in thickness. The St. Peter is a medium to fine grained, well sorted, well rounded sandstone that is friable and weakly cemented . The St. Peter is a clean sandstone, free of clays, carbonates, and heavy minerals, except in local areas. At the base of the St. Peter is a conglomerate unit that is locally present.		OsP	The St. Peter underlies the Glenwood formation when the upper unit is present. The Sandstone is friable, clean, well sorted, and poorly cemented. This unit is the principal drinking aquifer for Winnebago County.
		Water	

contact
AA' cross section line
BB' cross section line

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