

EXPLANATION

Series	Glaciation	Substage	Moraine or Drift sheet	Symbol	Description			
Q U E N A				Hfp	Flood plain; gravel, silt alluvium			
				Hmf	Mudflows; pebbly silt, marginal to flood plains, derived from clayey till (Wtc)			
				Htl	Landslides, slumps; developed on exposures of clayey till (Wtc)			
				Hft	Low terraces of Cattaraugus Creek and tributaries; ferruginous gravel and silt, wood bearing			
				Hht	High terraces of Cattaraugus Creek and tributaries; younger terraces underlain by ferruginous gravel and silt alluvium, wood bearing; older terraces, commonly developed on dissected outwash gravel, are in part of Woodfordian age.			
T E I C H E S O I C E R S O O T N O S I A C I E N N A Y E N	P W L I E I A	W O S O D F I A V E R Y	L A K E E S C A R P M E N T D E F I A N C E I A V E R Y	Wos	Late outwash; pebble gravel, sand; incised into earlier outwash			
				Wog	Outwash; cobble gravel, sand			
				Wls	Lacustrine sand, silt, some pebble gravel			
				Wkg	Ice-contact cobble gravel, sand; kamic			
				Wdo	Outwash; pebble gravel, sand; along ice margin, westward draining, overlying clayey till (Wtc)			
				Wfg	Fluvial gravel, sand, derived from upland drainage, hummocky where laid over thin ice; overlies clayey till (Wtc)			
				Wtc	Till, clayey with pebbles and cobbles; deformed silt stringers, minor over-ridden pebble gravel, sand; mainly reworked lacustrines. May include Hiram equivalent till in upper few feet			
				~~~~~Erie Interstade~~~~~				
				Wrg/Wsd	Ice-contact gravel, sand; kame terraces (Wrg). Recessional kame delta sand, silt, clay (Wsd) beneath clayey till (Wtc)			
				Wrm	Ground moraine; mixed stony till, stratified drift; ice marginal			
				Wem	End moraine; mixed gravel, sand, till; distal limit of bright stratified drift			
				Wvt	Valley train; outwash gravel, sand; distally from bright drift limit			
Wlb	Lacustrine silt, clay; bordering end and recessional moraines; includes later bogs							
Wlt	Lodgment till, >5' thick; stony, silty, variously bright and drab							
Wtt	Lodgment till, <5' thick; occasional rock outcrop							
Y E N	A L T O N I A N ?			O	Colluvium; till, talus			
				L	Lacustrine silt, clay; marginal to ice-contact deposits			
				E	Ice-contact gravel, sand; ground moraine; drab			
				A	Lodgment, ablation till, stony, silty; >3' thick, drab			
				N	Lodgment, ablation till, <3' thick; frequent rock outcrop			
DEVONIAN				Dr	Bedrock outcrop; shales, siltstones, sandstones of the Canadaway and Conneaut Groups (Fisher and others, 1970)			
					Melt-water channel, with direction of flow			