

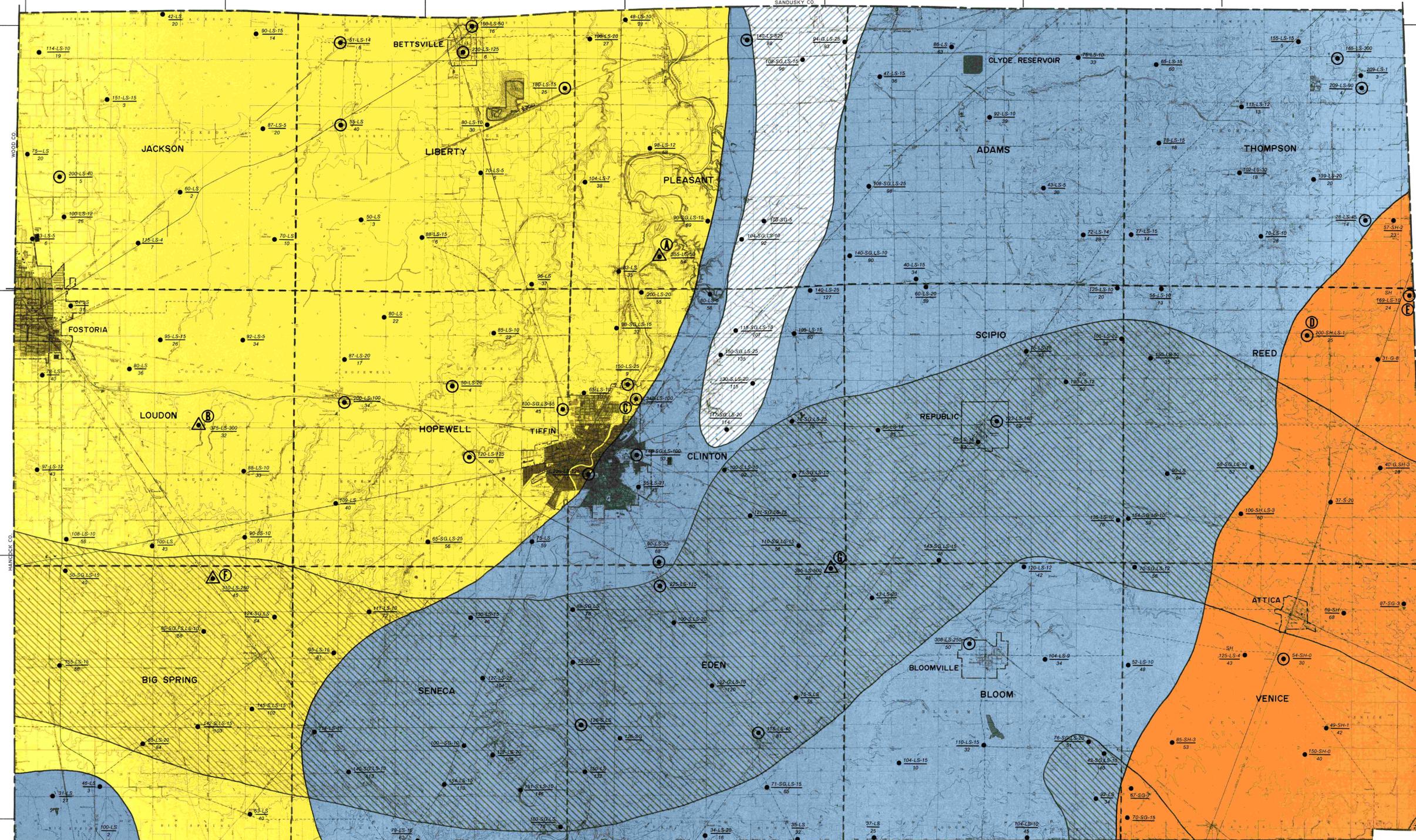
Ground-Water Resources of SENECA COUNTY

by
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Scale in miles
1:62,500



Index Map



AREAS IN WHICH YIELDS OF 100 TO 500 GALLONS PER MINUTE MAY BE DEVELOPED



Proven yields of as much as 500 gallons per minute have been developed at depths of less than 300 feet. Farm and domestic supplies of 10 to 25 gallons per minute are usually encountered at depths of less than 125 feet. Presence of hydrogen sulfide is noted.



Sand and gravel deposits interbedded in thick layers of clayey till partially fill remnant buried channel and yield farm and domestic supplies of as much as 15 gallons per minute. Underlying limestone bedrock yields large industrial supplies at depths of less than 225 feet.

AREAS IN WHICH YIELDS OF AS MUCH AS 100, OR MORE, GALLONS PER MINUTE MAY BE DEVELOPED



Carbonate aquifer beneath relatively thin glacial drift may yield as much as 100, or more, gallons per minute at depths of less than 200 feet. Farm and domestic supplies of less than 10 gallons per minute are developed at depths of less than 100 feet.

AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED



Water-bearing lenses of sand and gravel, interbedded in fairly thick layers of clay and deposited as glacial moraine as much as 150 feet thick, yield 10 gallons per minute. Although glacial deposits are principal source supply above non-water-bearing shale bedrock area in eastern portion of the county, deeper drilling to limestone bedrock may be necessary if permeable deposits are not encountered in the central and western portions of the county.

AREAS IN WHICH YIELDS OF LESS THAN 2 GALLONS PER MINUTE MAY BE DEVELOPED



Relatively thin clayey till above non-water-bearing shale bedrock yields less than two gallons per minute at depths of less than 45 feet. Dry wells are not uncommon and homeowners rely upon additional storage and/or cisterns to maintain daily requirements. Deep drilling will yield black sulfurous and brackish water. See chemical analysis D.

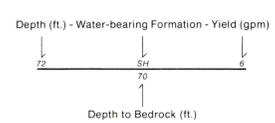


Fine grained sand and silt above non-water-bearing shale bedrock. Material generally contains water but difficult to recover. Yields less than 1 gallon per minute.

- Domestic Well
- ⊙ Industrial - Municipal Well
- ⓑ Site Chemical Analysis
- ⚠ Test Well

FORMATIONS

- LS - Limestone
- FS - Fine Sand
- SH - Shale
- G - Gravel
- CL - Clay
- S - Sand



Cartography: Douglas E. Keen
Published, 1982

Ohio Department of Natural Resources
DIVISION OF WATER
Fountain Square
Columbus, Ohio 43224

The ground-water characteristics have been mapped regionally, based upon interpretations of water well records and the area's geology and hydrology. Well log data on the map were selected as typical for the areas shown. Information regarding specific sites may be obtained from the Division of Water.

Well Site	A	B	C	D	E	F	G
Depth (ft.)	355	375	80	200	169	310	395
Critical Pumping Level	250	150	-	-	-	100	115
Iron	86	1.6	2.6	-	-	2.3	.85
Hardness as CaCO ₃	459	784	454	2010	0	863	620
Dissolved Solids	600	1300	571	3120	-	1410	775
Sulfates	181	716	140	1780	-	780	302
Hydrogen Sulfide	3	-	-	3.4	82	7	1.1
Aquifer	Ls	Ls	Ls	Ls	Ls	Ls	Ls

Chemical Constituents as milligrams per liter (mg/l)