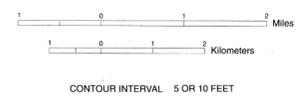


Ground Water Resources of CLINTON COUNTY

by James J. Schmidt



- County Line
- Township Line
- Incorporated City Limit

Well Yields

- AREAS IN WHICH YIELDS OF AS MUCH AS 75 GALLONS PER MINUTE MAY BE DEVELOPED**
Niagaran limestone bedrock yields as much as 60 gallons per minute at depths of less than 120 feet to larger diameter wells. Domestic supplies are developed at depths of 40 to 95 feet.
- AREAS IN WHICH YIELDS OF 10 TO 25 GALLONS PER MINUTE MAY BE DEVELOPED**
Relatively shallow basal Niagaran limestone aquifer yields as much as 25 gallons per minute at depths of less than 100 feet. Lower yields are developed from wells drilled to depths of 135 feet or greater.
- AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED**
Wells developed in basal Silurian limestone bedrock at average depths of 50 to 75 feet. Drilling deeper than 100 feet is not advisable owing to the presence of the non-water-bearing Ordovician bedrock. Cisterns and/or storage may be necessary for peak periods of domestic water demand.
- AREAS IN WHICH YIELDS OF LESS THAN 3 GALLONS PER MINUTE MAY BE DEVELOPED**
Poor source of ground water. If water is present in the interbedded Ordovician shale and limestone bedrock, it usually occurs in the upper few feet where the rock is weathered and broken. Drilling more than 30 feet into the rock is not recommended. Clayey till overburden ranges from 30 to 70 feet thick. Occasional lenses of sand and gravel may supply small domestic needs. Homeowners should rely upon cisterns and/or storage to provide for daily water demand.

Well Site Symbols

WELL INFORMATION
(SEE NOTE)

DEPTH (ft.)
Total depth of well in feet

WELL SITE
Approximate well location

WELL TYPES

- Well Site
- Municipal-Industrial Well
- A Chemical Analyses

AQUIFER TYPE
Water-bearing formation

YIELD (gpm)
Amount of water a well produces in gallons per minute.

DEPTH TO BEDROCK (ft.)
Depth to bedrock in feet.

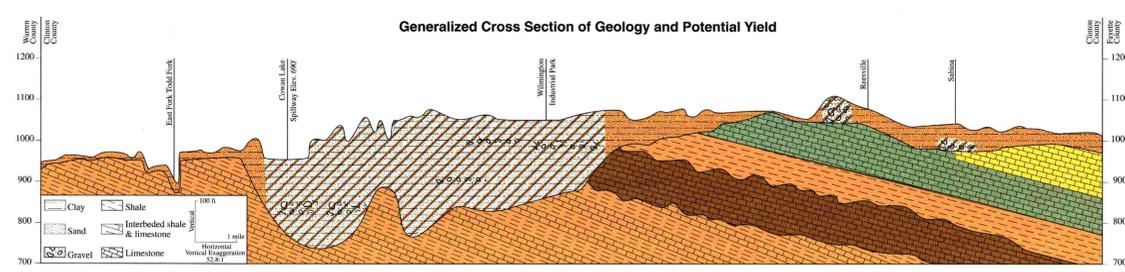
AQUIFER TYPES

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

Chemical Analysis Table

Well Site	A	B	C	D	E	F
Depth (Feet)	100+	65	145	63	55	14
Iron (Fe)	.2	.47	2.2	1.8	1.8	—
Hardness as CaCO ₃	420	469	315	390	397	—
pH	7.4	7.2	7.9	7.7	7.6	—
Dissolved Solids	619	567	1350	551	506	—
Sulfate (SO)	—	38	5.2	22	94	—
Chloride (Cl)	5	118	690	12	5.0	—
Fluoride (F)	1.1	.2	1.8	.8	.6	—
Aquifer	Limestone	Limestone	Sand & Gravel	Sand & Gravel	Gravel	Sand & Gravel
A	Village of Sabina - South Wall Fields					
D	Clinton Air Force Base - Well #1 Bldg, 415					
E	State of Ohio, Division of Parks					
F	Village of Martinoville - Susceptible to Nitrate Contamination					
Chemical constituents as milligrams per liter (mg/l)						

Generalized Cross Section of Geology and Potential Yield



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

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