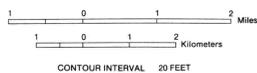


# Ground-Water Resources of BELMONT COUNTY

by  
Alfred C. Walker



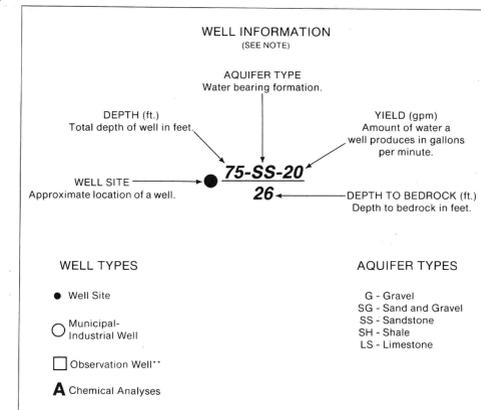
- County Line
- - - Township Line
- - - - - Incorporated City Limit
- State Line

### Well Yields

- AREAS IN WHICH SEVERAL HUNDRED GALLONS PER MINUTE MAY BE DEVELOPED**  
 Large industrial and municipal supplies are available from thick, permeable sand and gravel deposits. This valley fill material ranges from 60 to 85 feet thick and is hydraulically connected to the Ohio River. Yields in excess of 1,000 gallons per minute may be developed from horizontal collector wells. Wells in this area supply much of the county through regional water systems.
- AREAS IN WHICH YIELDS OF 25 TO 100 GALLONS PER MINUTE MAY BE DEVELOPED**  
 Smaller industrial supplies may be available from sand and gravel deposits in areas which are not immediately adjacent to the Ohio River.
- AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED**  
 Fill, as much as 60 feet thick, along portions of stream valleys contain lenses of sand and gravel which may yield domestic water supplies. Otherwise, wells must be drilled into the underlying bedrock which is described below.
- AREAS IN WHICH YIELDS SELDOM EXCEED 3 GALLONS PER MINUTE**  
 Very limited, and often inadequate, supplies are obtained from thin beds of sandstone, shale and limestone. Yields average less than two gallons per minute and the average depth of wells is 95 feet.



### Well Site Symbols



### Chemical Analysis Table

Well Site	A	B	C
AQUIFER	SS	SG	SG
Calcium (Ca)	71.0	10.0	7.0
Chloride (Cl)	2.0	24	18
Fluoride (F)	.4	.14	.13
Iron (Fe)	.46	.03	.03
Magnesium (Mg)	20	13	17
Manganese (Mn)	.03	0	.03
Sulfate (SO <sub>4</sub> )	36	122	106
Total dissolved solids	366	388	441

Chemical constituents as milligrams per liter (mg/l)

### 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 the Division of Water.

\*\* Observation well sites indicate the location of wells used to collect ground-water level information. These wells are part of the State observation well network. Hydrographs of the water levels recorded in these and other State observation wells can be obtained through ODNR-Division of Water.