Ground-Water Resources of HURON COUNTY

by

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0 1 2 3 4 Miles

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Well Site Symbols

Depth (ft.) - Water-bearing Formation - Yield (gpm)

154-LS-15
110

Depth to Bedrock (ft.)

Formations

S - Sand
G - Gravel
LS - Limestone
SH - Shale
FS - Fine Sand
SS-Sandstone

- Well Site
- Well Site-H_2S Noted
- Municipal-Industrial Well
- Test Well
- A Chemical Analyses

Chemical Analysis Table

Well Site	A	B	C	D	E
Depth	115	126	52	40	24
Aquifer	SG	SG	S	SH	S
Iron (Fe)	1.0	0.8	1.7	6.4	2.7
Calcium (Ca)	—	78.0	128	302	12
Sodium (Na)	—	17.0	—	235	744
Chloride (Cl)	68	27.0	13.0	177	910
Flouride (Fl)	1.0	0.2	0.1	0.5	1.0
Sulfate (SO_4)	—	147	134	1140	14
Dissolved Solids	1055	—	455	2250	1900
Hardness as $CaCO_3$	480	—	340	1300	43
PH	7.3	7.9	7.7	7.1	7.9

Chemical constituents as milligrams per liter (mg/l).

Well Yields

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

Yields of 500 gallons per minute can be developed in cavernous limestone and dolomite. Domestic supplies are generally obtained at depths of around 100 feet.

Areas in which there is a concentration of contamination from the underground disposal of storm water runoff from Bellevue.

Municipal and industrial supplies are available from sand and gravel deposits encountered at depths up to 150 feet. Test drilling may be required to locate coarse material for maximum yields.

AREAS IN WHICH YIELDS OF 25 TO 100 GALLONS PER MINUTE MAY BE DEVELOPED

Buried valley containing up to 150 feet of unconsolidated deposits. Valley fill material consists primarily of silty sand and clay with thin interbedded lenses of sand and gravel. Extensive test drilling may be needed to locate coarse materials for maximum yields.

AREAS IN WHICH YIELDS OF 5 TO 25 GALLONS PER MINUTE MAY BE DEVELOPED

Ground water supplies are developed from sandstone and shale formations of the Cuyahoga Group with yields of 5 to 25 gallons per minute.

Ground water is obtained from thin sand and gravel lenses interbedded with silt and clay. Yields range from 5 to 10 gallons per minute with screened wells producing as much as 25 gallons per minute.

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

Ground water obtained from sandstone and sandy shale bedrock. Yields are generally limited to less than 10 gallons per minute.

Wells in the northern half of the county obtain water from the Berea sandstone at depths generally less than 100 feet. Although this formation covers a larger area than shown, its thickness and recharge potential limit productivity to isolated zones.

Wells in the southern half of the county obtain water from sandstones and sandy shale within the Cuyahoga formation. Deeper drilling into the Berea sandstone at depths over 100 feet may produce salt water or gas.

Ground water obtained from sand and gravel lenses within the glacial overburden. Wells not encountering sand and gravel may expect yields of less than 2 gallons per minute from the underlying shale bedrock.

AREAS IN WHICH YIELDS SELDOM EXCEED 3 GALLONS PER MINUTE

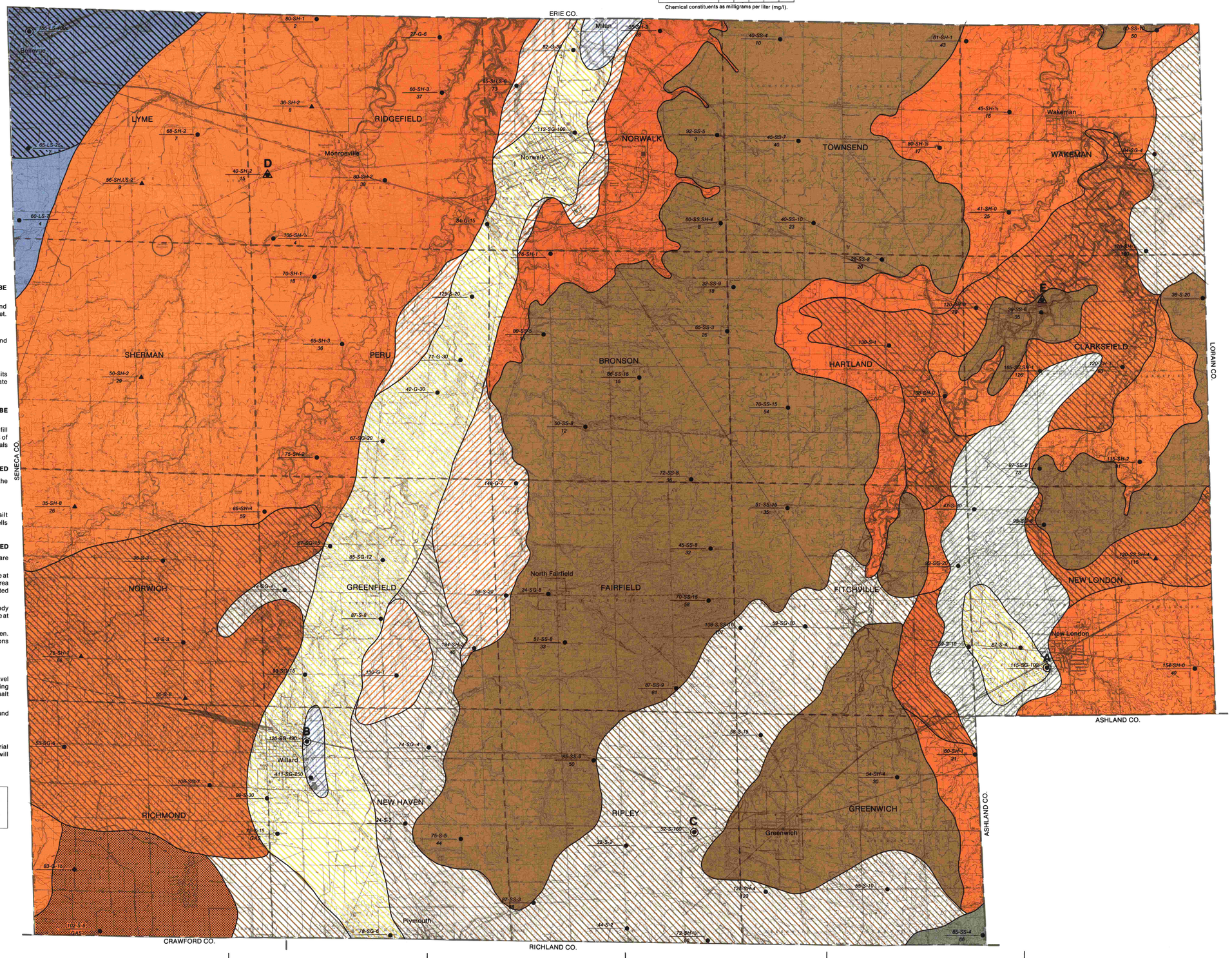
Limited quantities of water available from thin, discontinuous sand and gravel deposits interbedded in fine sandy clay or from the underlying shale. Drilling deeper than 30 feet into the shale is not recommended. Occasional gas or salt noted in the southeastern portion of the county.

Thick deposits of clay, sand and gravel cover shale bedrock. Gravel packs and screens may be necessary to properly develop these thin deposits.

Fine grained sand and silt above non-water-bearing shale bedrock. Material generally contains water but is difficult to recover. Gravel packs and screens will help to maximize yields.

The ground-water characteristics have been mapped regionally, based upon interpretations of water well records and the area's geology and hydrology.

Information regarding specific sites may be obtained from the Division of Water.



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Naturally OHIO the heart of it all!

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