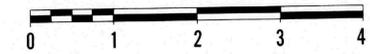


Ground-Water Resources of HARDIN COUNTY

by
James J. Schmidt
1982

Scale in miles
1:62,500



Contour Interval: 10 feet



Index Map

Well Site	A	B	C	D	E	F	G	H	I
Depth (feet)	220	250	210	325	330	410	66	108	200
Hardness as CaCO ₃	754	592	837	420	768	430	755	481	580
Iron	0.36	3.4	0.96	0.76	1.4	0.26	8.5	0.24	2.6
Dissolved Solids	1020	725	1080	564	1080	598	999	614	741
Sulfates	552	239	516	160	580	210	489	226	290
Hydrogen Sulfide	0.0	.7	0.5	0.0	0.7	0.0	0.0	0.0	0.5
Fluoride	2.0	1.4	1.8	1.8	1.7	1.7	1.4	1.4	2.0
Aquifer	LS	LS	LS	LS	LS	LS	S&G	G	LS

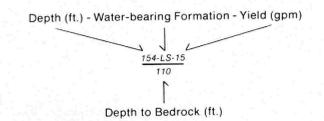
Chemical Constituents shown as milligrams per liter (mg/l)

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

- Farm and domestic supplies usually developed at depths of less than 135 feet. Yields of 100 to 500, or more, gallons per minute may be developed from limestone/dolomite at depths of less than 300 feet. Many drilling contractors drill wells less than 65 feet to attempt the development of ground water free of hydrogen sulfide.
- Unconsolidated deposits associated with glacial moraines are more than 55 feet thick. Domestic supplies may be developed from thin lenses of sand and gravel interbedded in thick glacial till or wells are deepened to principal aquifer, the limestone bedrock.
- Thin lenses of sand and gravel interbedded in thick layers of clay partially fill buried valley. Yields of 5 to 20 gallons per minute may be developed. However, wells as much as 340 feet deep into the underlying limestone are noted.

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

- Limestone/dolomite aquifer may yield as much as 25 to 100 gallons per minute at depths of less than 200 feet. Shallow wells less than 65 feet deep often drilled to attempt the development of sulfur free water. Yields of less than 5 gallons per minute may be recorded.



- Domestic Well
- ⊙ Public or Industrial Well
- ⓑ Well Site-Chemical Analysis
- ⚠ Test Well

- ### FORMATIONS
- LS - Limestone
 - G - Gravel
 - S - Sand

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.

Cartography: Douglas E. Keen
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