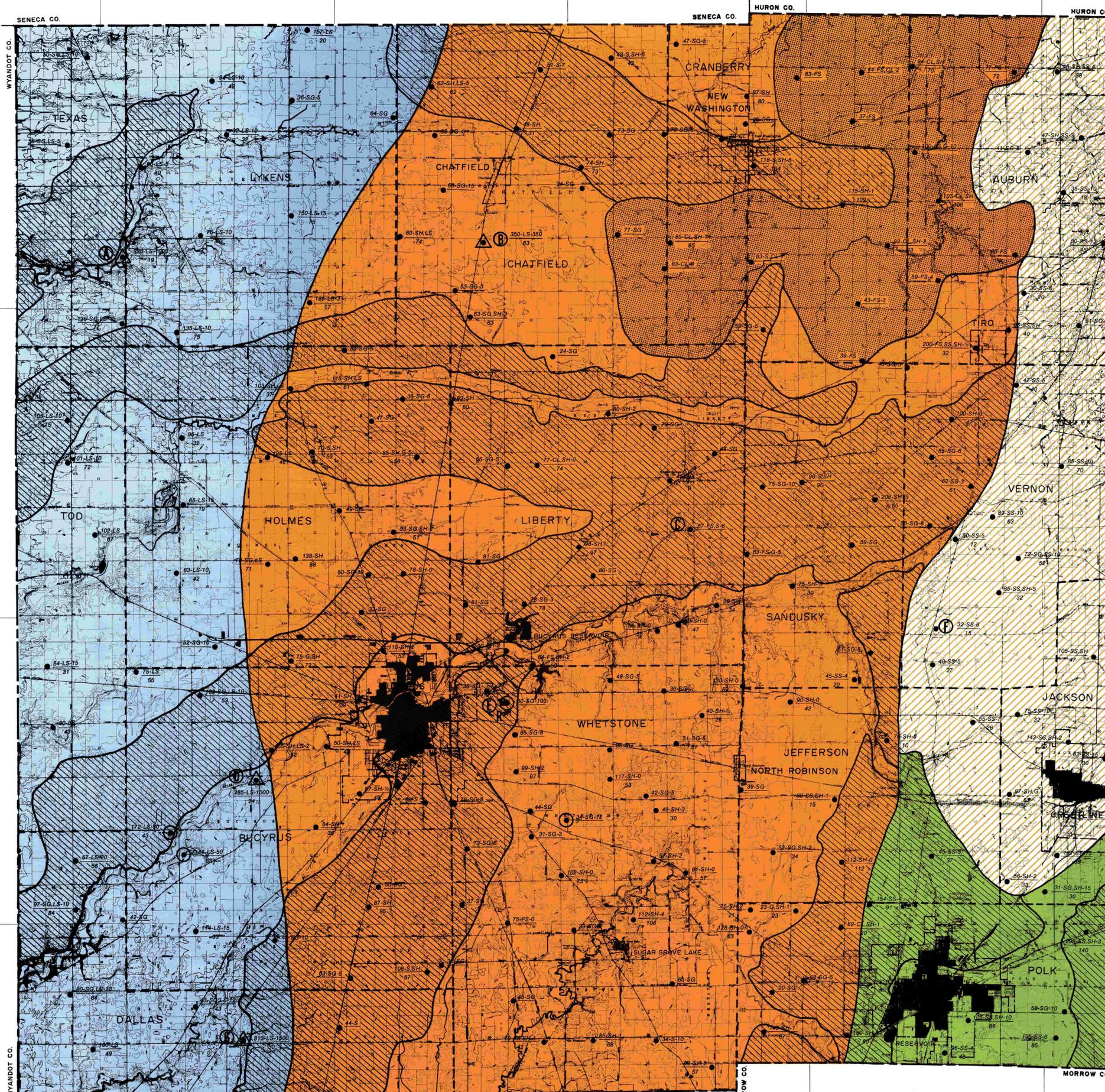


# Ground-Water Resources of CRAWFORD COUNTY

by  
James J. Schmidt



Index Map



LEGEND

- AREAS IN WHICH YIELDS OF 100 TO 500 GALLONS PER MINUTE MAY BE DEVELOPED.  
Proven yields of more than 1500 gallons per minute have been developed at depths of less than 300 feet. Regional yields are projected as less than 500 gallons per minute. Farm and domestic supplies of 10 to 15 gallons per minute are usually encountered at depths of less than 95 feet. Presence of hydrogen sulfide is noted.
- AREAS IN WHICH YIELDS OF AS MUCH AS 20 GALLONS PER MINUTE MAY BE DEVELOPED.  
Domestic ground-water supplies are developed from sandstone-shale formations at depths of 80 to 110 feet. Yields seldom exceed 15 gallons per minute with hydrogen sulfide often noted.
- AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE MAY BE DEVELOPED.  
Sandstone and shale bedrock is principal source of water at depths of about 85 feet, although domestic supplies have been developed from glacial overburden at depths of 35 to 90 feet.
- Water-bearing lenses of sand and gravel, interbedded in fairly thick layers of clay and deposited as glacial moraines, yield as much as 10 gallons per minute. If permeable sand and gravel is not encountered above the limestone or sandstone formations, wells may be deepened to develop adequate supplies.
- AREAS IN WHICH YIELDS OF LESS THAN 3 GALLONS PER MINUTE MAY BE DEVELOPED.  
Clayey till above non-water-bearing shale bedrock yields less than two gallons per minute. Dry wells are not uncommon and homeowners rely upon additional storage and/or cisterns to maintain daily requirements. Shallow wells less than 40 feet deep often yield hydrogen sulfide free water. Deeper drilling will yield black sulfurous water. Chemical analysis B.
- Fine grained sand and silt above non-water-bearing shale bedrock. Material generally contains water but difficult to recover. Yields generally less than 1 gallon per minute.

SYMBOLS

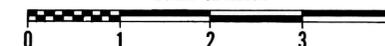
- Depth (ft) - Water bearing Formations - Yield (gpm)  
Depth to Bedrock (ft)
- S - Sand
  - SH - Shale
  - SS - Sandstone
  - CL - Clay
  - G - Gravel
  - FS - Fine Sand
  - LS - Limestone
- Specialized Development Recharge Lagoons
  - Test Well
  - Site - Chemical Analysis
  - Water Well
  - Industrial - Municipal Well

Well Site	A	B	C	D	E	F	G
Depth (ft)	330	350	67	285	60	32	313
Critical Pumping Level (ft)	125	-	-	90	-	-	110
Hardness as CaCO <sub>3</sub>	325	2180	336	924	730	391	490
Iron	64	3.4	2.1	12	3.8	47	1.7
Dissolved Solids	357	2900	415	1190	882	445	570
Sulfates (SO <sub>4</sub> )	53	1800	40	642	310	31	180
Hydrogen Sulfide (H <sub>2</sub> S)	-	40+	-	7.5	-	-	-
Aquifer	LS	LS	S&G	LS	S&G	SS	LS

Chemical constituents as milligrams per liter (mg/l). \*Field Tested

1:62,500

Scale in miles



Contour Interval: 10 feet

Ohio Department of Natural Resources

DIVISION OF WATER  
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