

# GROUNDWATER QUALITY INVESTIGATION OF ST. CROIX COUNTY, WISCONSIN

Miscellaneous Map Series

Compiled by I.D. Lippelt, 1989

Compilation assistance by E.C. Lawson,  
G.S. Steinhart, and J.A. Gassen

Drafted by E.C. Lawson

Plate 5 Total Hardness in mg/L (CaCO<sub>3</sub>)

A part of the St. Croix County Groundwater Resource Investigation, a joint project of the Wisconsin Geological and Natural History Survey and the St. Croix County Board

Samples numbered 1-610 and 1000, 1001 collected July 15, 1987 through June 30, 1988, by Matt Hobson, Paul Magnan, Kevin Schoessow, and Jim Kosel. Samples were frozen for storage prior to analysis.

Samples numbered 701-775 collected February 17, 18, and 19, 1989, by E.C. Lawson and G.S. Steinhart.

Note: two samples are from locations in Dunn County, east of the St. Croix/Dunn County border.

Chemical analyses were performed during September 1987 through February 1989 by K.L. Lund

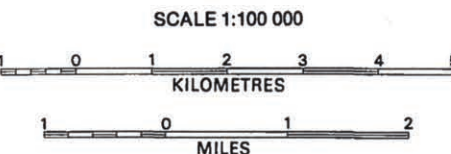
Analytical method used: EDTA titration using ManVer 2 Hardness Reagent and a HACH digital titrator  
Reference: HACH Company Digital Titrator Model 16900-01 Methods Manual, 1980, p. 74-81  
Reproducibility:  $\pm 5$  mg/L at 0-200 mg/L

## Explanation

Symbol Geologic materials contributing water to well, and source of data

- sand and/or gravel; from Well Constructor's Report<sup>1</sup>
- any one or more of: sandstone, limestone, dolomite, shale, or rock; from Well Constructor's Report<sup>1</sup>
- ⑦ unknown; homeowner information either blank or ambiguous; no known Well Constructor's Report
- ⊙ sand and/or gravel; from homeowner information; no known Well Constructor's Report
- ⊙ any one or more of: sandstone, limestone, dolomite, shale or rock; from homeowner information; no known Well Constructor's Report
- ③ spring; from homeowner information
- 143 value of sampled well
- \* sample was softened; hardness value not meaningful

<sup>1</sup>Well Constructor's Report represents the most probable match to the sampled well on the basis of information provided by the homeowner, the location of the well as reported by the well driller, land ownership information from various plat books, and locations of buildings as shown on United States Geological Survey 7.5-minute topographic maps.



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