

# 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 7 Ferrrous Iron in mg/L (Fe)

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 Hobsen, Paul Magnan, Kevin Schoessow, and Jim Kosei. 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

Samples were not acidified at the time of collection, so iron values represent only the amount remaining in solution at the time of analysis. Iron values as reported on this map are probably less than total iron values present in groundwater in the field.

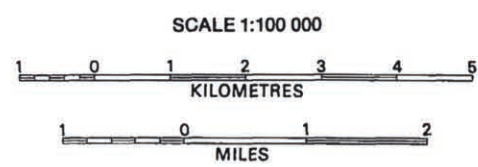
Analytical method used: 1,10-phenanthroline using FerroVer Iron Reagent and a HACH Kit; samples are not digested  
Reference: HACH Chemical Company Water Analysis Handbook, 1980 edition, p. 2-106 through 2-108  
Reproducibility: ± 0.1 mg/L at 0-3 mg/L

### 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>
- ⊙ 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
- Ⓢ spring; from homeowner information
- 0.1 value of sampled well
- ▲ below detection limit of 0.1
- \* copper interference on iron test; iron value not meaningful

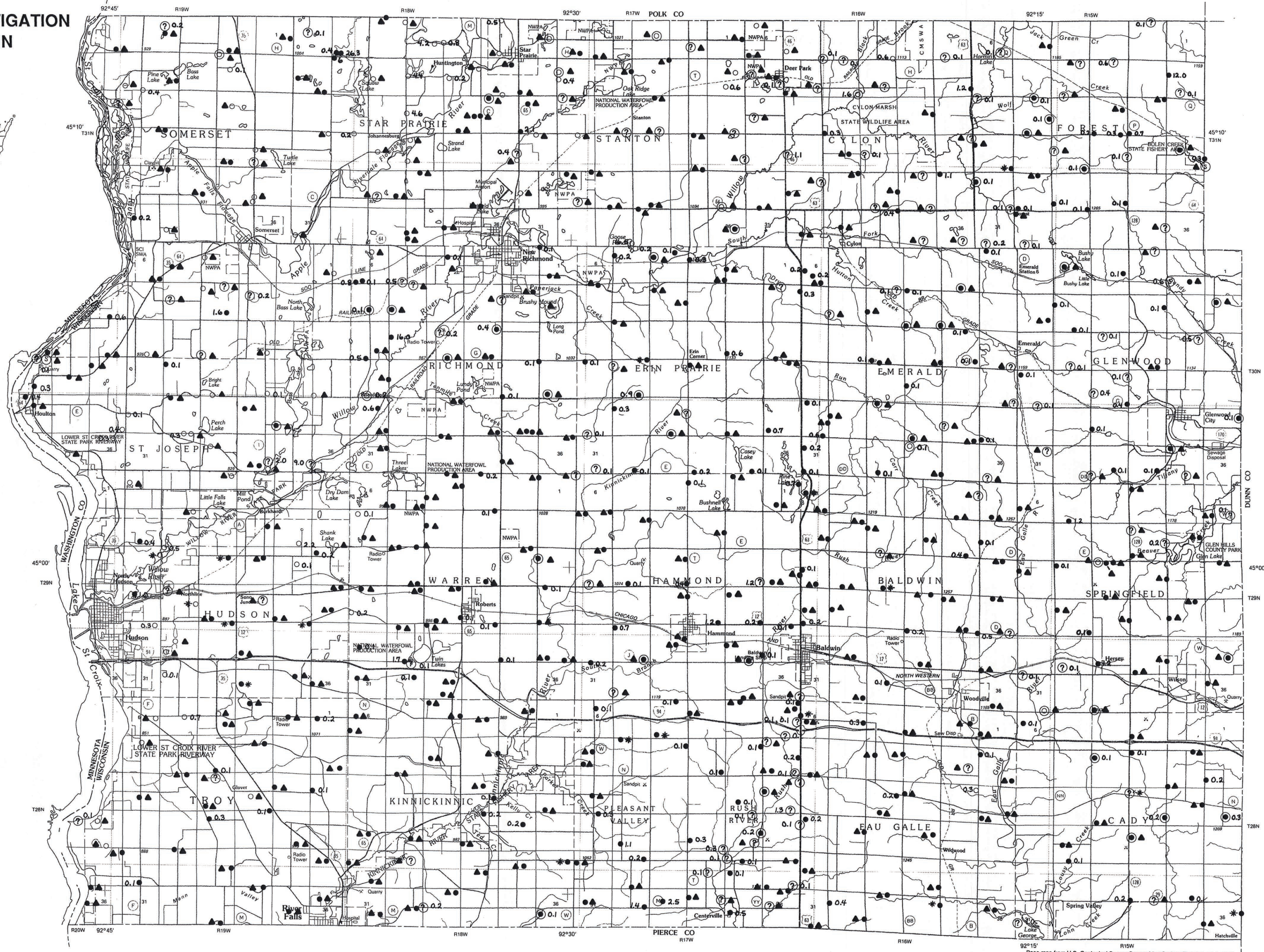
<sup>1</sup>Well Constructor's Report represents the most probable match to the sampled well on the basis of information provided by the homeowner, the location of the well as reported by the well driller, land ownership information from various plat books, and locations of buildings as shown on United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



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Base map from U.S. Geological Survey County Map Series, (Topographic), 1985.