

Cross Section Explanation

Aquifers and aquitards
Interpreted tritium age is indicated by background color. Overlying white hatching pattern indicates areas with few or no wells, resulting in speculative unit boundaries.

Quaternary unconsolidated
See Figure 2 in the report for geologic unit correlation.

sc	brs3
pgs	brt3
gs	uss
ou	uts
ns	scs
hsi	sct
is	mls
hta0	mlt
hsa1	fl2
hta1	fs2
hta2	ft2
hta2	ebs
usrm	ebt
utrm	usw
brl	utw
brs1	utr
brs2	uns
brt2	ups

Ku	Unnamed Cretaceous
pCu	Precambrian

Quaternary aquitards
Grouped by texture ranging from highest to lowest sand content indicating relative hydraulic conductivity.

Geologic unit code	Percent sand
hta0, hta1, hta2	>50% and ≤60%
brt1, brt2, brt3, ft2, sct	>40% and ≤50%
mlt, uts, utw	>30% and ≤40%
ebt, utr, utrm	≤30%

Tritium age
Darker color in small vertical rectangle (well screen symbol) indicates tritium age of water sampled in well. Lighter color indicates interpreted age of water in aquifer.

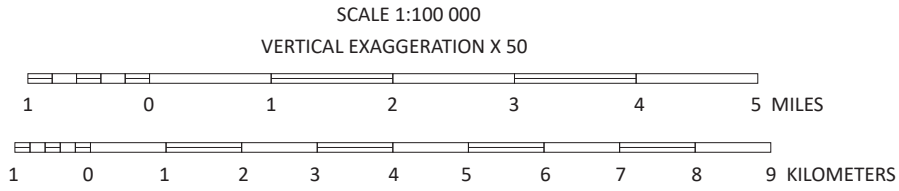
Modern	water entered the ground after 1953.
Mixed	water is a mixture of modern and premodern waters.
Mostly premodern	water entered the ground before 1953 but may contain a small amount of modern water.
Well not sampled for tritium.	

Symbols and labels

5.96	Chloride: if shown, concentration is ≥5 ppm. (*naturally elevated, *source unknown; italicized labels indicate source was adjusted)
1.25	Nitrate: if shown, concentration is >1 ppm.
25,000	Carbon-14 (¹⁴ C): estimated groundwater residence time in years
E	Groundwater sample with evaporative signature
←	General groundwater flow direction
.....1400.....	Approximate equipotential contour; contour interval 25 feet
—	Geologic contact
—	Land or bedrock surface
- - - -	Water table
▨	Speculative area (Part A)

Groundwater conditions

⊙	Lateral flow: aquifer may have received lateral recharge from upgradient areas of higher pollution sensitivity.
⊙	Unknown: neither the pollution sensitivity model nor groundwater conditions explained the presence of mixed or modern tritium-age water.
⊙	Groundwater movement out of cross section.



This map was compiled and generated in a geographic information system. Digital data products are available from the DNR Groundwater Atlas Program [page](https://mndnr.gov/groundwatermapping) (mndnr.gov/groundwatermapping).

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Base modified from Minnesota Geological Survey, Geologic Atlas of Wadena County, 2016.

Universal Transverse Mercator projection, Zone 15N, North American Datum of 1983, North American Vertical Datum of 1988.



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