

Quaternary unconsolidated sediments

Interpreted tritium age is indicated by background color.

Surficial sand and gravel

Buried aquifer or aquifer group

rlf (ro, roc, rgs, rls, rlg)

gr (goc, gss, gsg, gssb, gss2, gsg2, gds, gdg)

nh (nhga, nhs, nhg, nhc, nhgb, nhsb) ot/nv (osua, osu, ogu, nvs)

dg/br (dgs, dgg) h1 (hs1, hg1)

h2 (hs2, hg2)

h3/h4 (hs3, hg3)

qu (qsu1, qgu) Undifferentiated Pleistocene

sediment (qu, qtu) Quaternary aquitards

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

Geologic unit code dgt, ht1, ht2, ht3 rlt, otu, bvt, nvt

Percent sand >50% and ≤60% >40% and ≤50% gst, gst2, gdt, nht >30% and ≤40% sl, bl, hp, rpt, nhl, olu ≤30%

SCALE 1:100 000

1 0 1 2 3 4 5 6 7 8 9 KILOMETERS

VERTICAL EXAGGERATION X 50

CROSS SECTION EXPLANATION

Bedrock Interpreted tritium age is indicated by pattern.

pcu Precambrian crystalline bedrock Ku Undifferentiated cretaceous

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.

Recent: water entered the ground since about 1953 (8 to 15 tritium units [TU]).

Mixed: water is a mixture of recent and vintage waters (greater than 1 TU to less than 8 TU).

Vintage: water entered the ground before 1953 (less than or equal to 1 TU).

Well not sampled for tritium.

Groundwater conditions ① Water from the surface moves through a thin layer of

overlying fine-grained material to an underlying aquifer. Groundwater moves from an overlying surficial aquifer

to a buried aquifer. Groundwater moves from an overlying buried aquifer to an underlying buried aquifer.

Groundwater flows laterally.

Groundwater flowpath is unknown.

Groundwater discharges to a surface-water body.

Symbols and labels

6.5* Chloride: if shown, concentration is ≥5 ppm.

(* naturally elevated values) 24 Arsenic: if shown, concentration is ≥2 ppb.

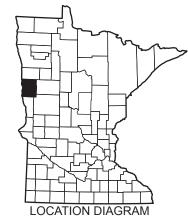
340 Manganese: is shown, concentration is ≥100 ppb. **1.39** Nitrate: if shown, concentration is ≥ 1 ppm. **30,000** Carbon-14 (¹⁴C): if shown, estimated groundwater

residence time in years. 285 Sulfate: if shown, concentration is ≥250 ppm.

General groundwater flow direction1040..... Approximate equipotential contour;

contour interval 40 feet

Land or bedrock surface ---- Water table



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

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

DEPARTMENT OF NATURAL RESOURCES

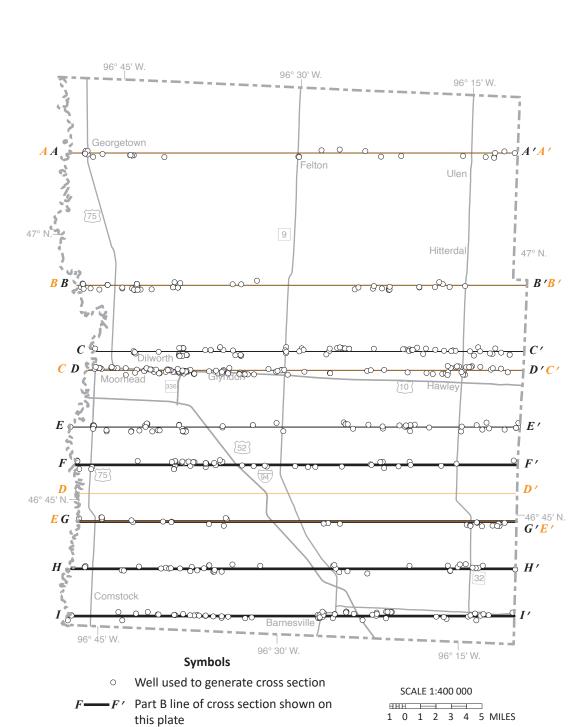
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A——A' Part B line of cross section not shown

on Plate 7

A——A' Part A line of cross section

1 0 1 2 3 4 5 6 7 KILOMETERS