

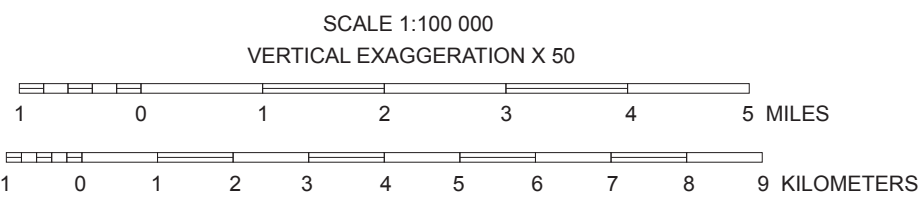
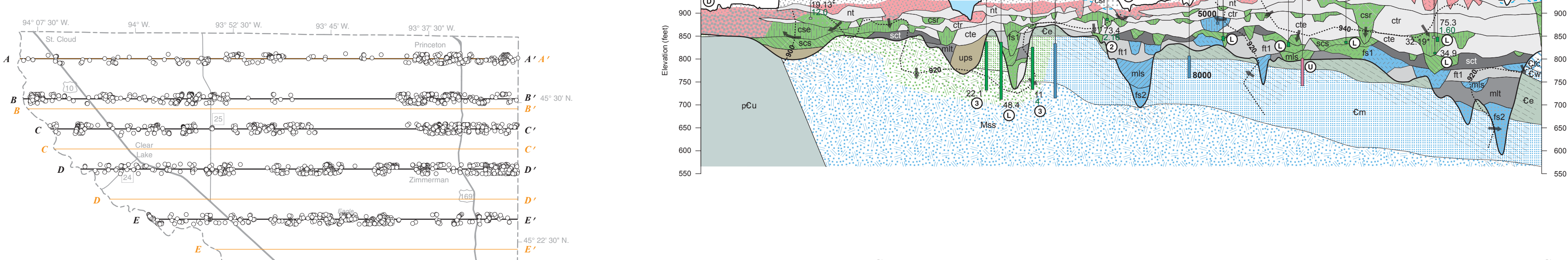
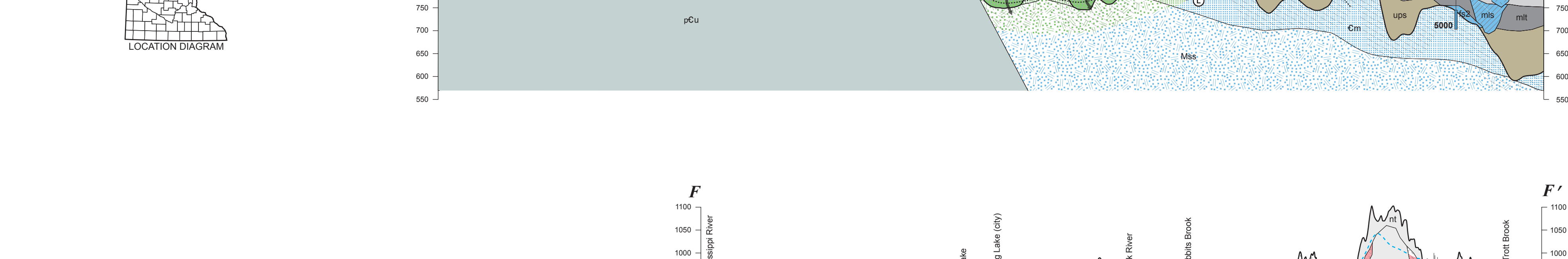
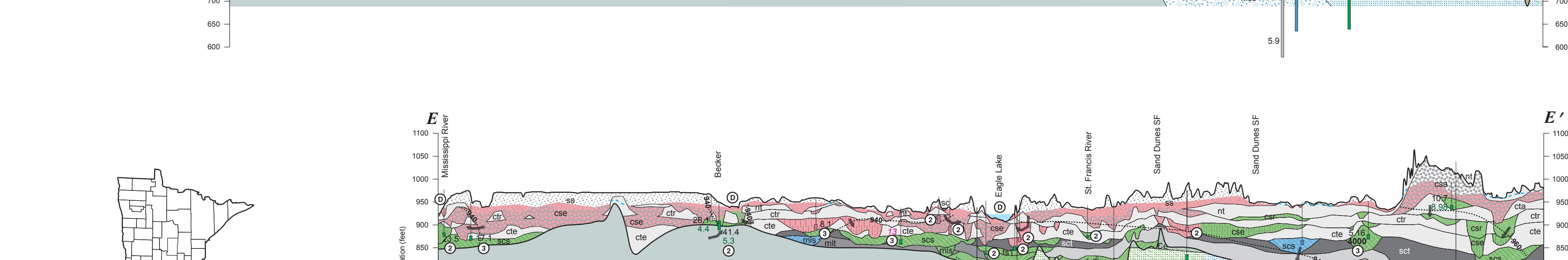
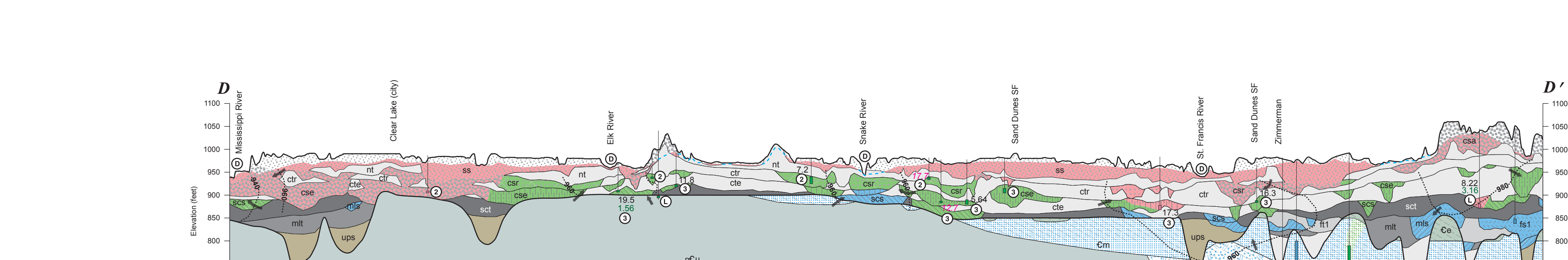
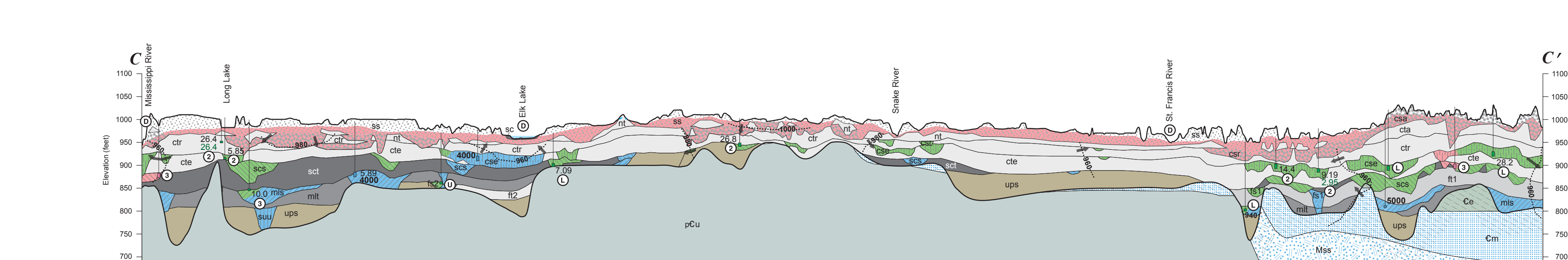
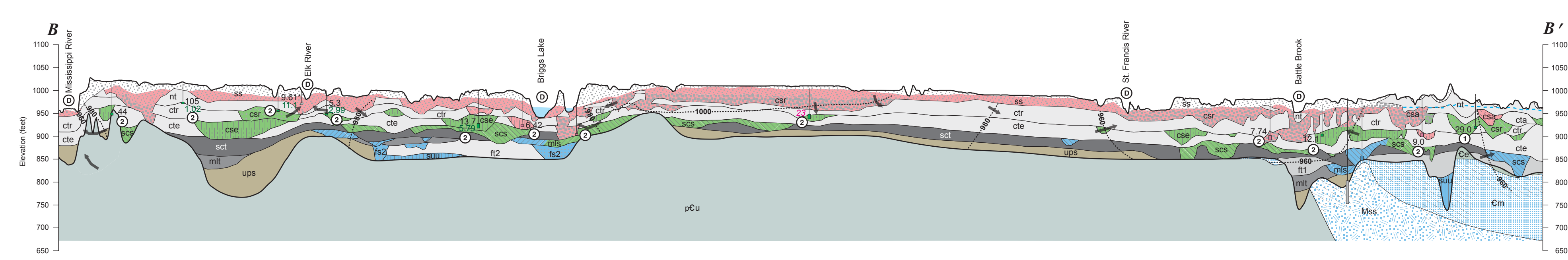
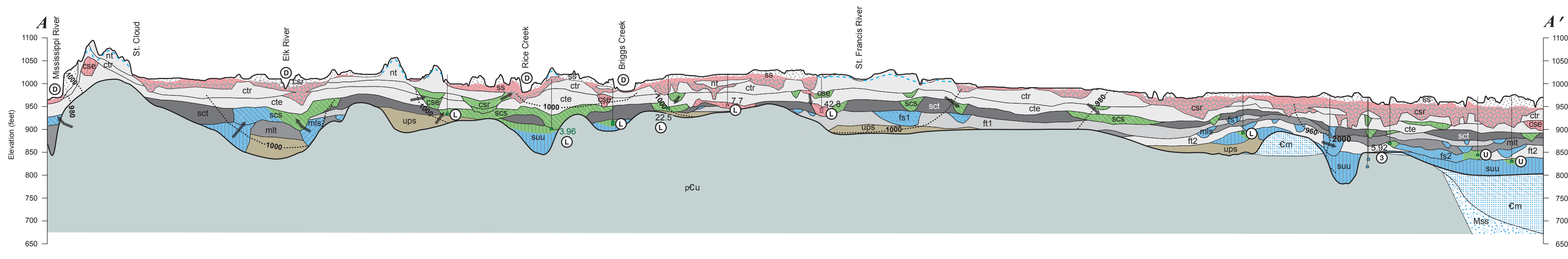
Hydrogeologic Cross Sections

By James A. Berg and Meagan E. Harold

2017

CROSS SECTION EXPLANATION

- Aquifers and aquitards grouped by stratigraphy**
Interpreted tritium age is indicated by background color
- Surficial sand**
- ss: Hydraulically connected combinations of surficial aquifer and portions of buried aquifers csa, csr, cse, and scs
 - fs1
 - fs2
 - suu
 - ups: Undifferentiated Pleistocene sediment
- Bedrock**
- Ctcr: Upper Tunnel City
 - Cw: Woneoc
 - Ce: Eau Claire Formation*
 - Cm: Mt. Simon
 - Mss: Mesoproterozoic sedimentary bedrock including Hinckley and Fond du Lac
 - pCu: Precambrian crystalline bedrock*
- Enhanced-permeability zone**
*aquitard
- Quaternary aquitards**
Grouped by texture ranging from highest to lowest sand content indicating relative hydraulic conductivity.
- Hydrogeologic unit code**
- ctr, ctr, cte: > 60%
 - nt: > 50% and ≤ 60%
 - mlt: > 30% and ≤ 40%
 - sct: ≤ 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.
- 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.
- Symbols and labels**
- 32.1: If shown, chloride concentration equals or exceeds 5 ppm. (* indicates source of chloride is unknown)
 - 12.7: If shown, arsenic concentration equals or exceeds 10 ppb.
 - 14.4: If shown, nitrate-nitrogen concentration equals or exceeds 1 ppm.
 - 2000: If shown, groundwater residence time in years as estimated by carbon-14 (¹⁴C) isotope analysis.
 - General groundwater flow direction
 - Approximate equipotential contour; contour interval 20 feet
 - Geologic contact
 - Land or bedrock surface
 - Water table
 - Lake
- Groundwater conditions**
- 1: Water from the surface moves through a thin layer of overlying fine-grained material to an underlying aquifer.
 - 2: Groundwater moves from an overlying surficial aquifer to a buried aquifer.
 - 3: Groundwater moves from an overlying buried aquifer to an underlying buried aquifer.
 - 4: Groundwater flows laterally.
 - 5: Groundwater flowpath is unknown.
 - 6: Groundwater discharges to a surface-water body.



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