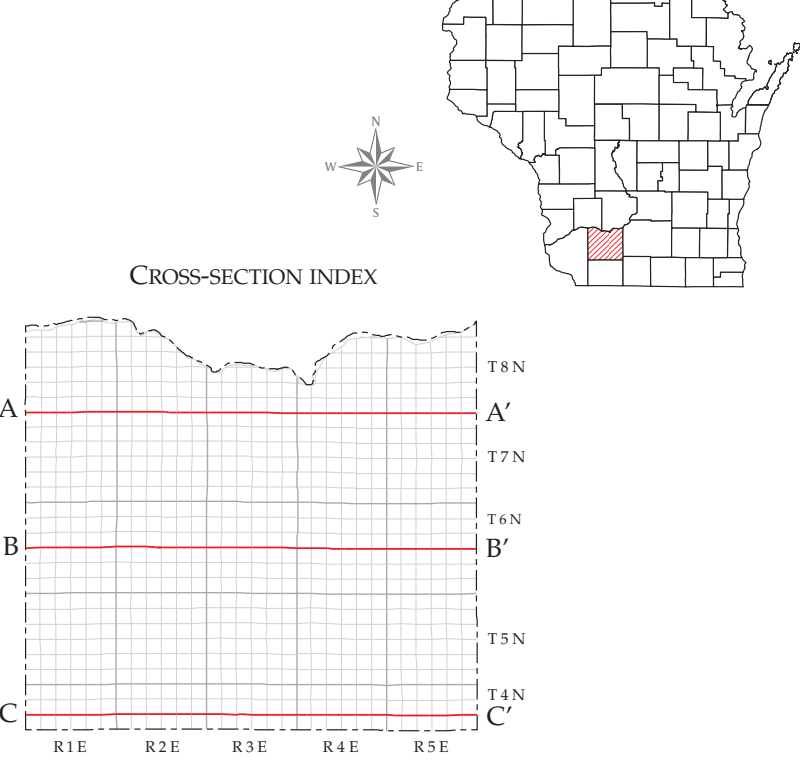


Wisconsin Geological and Natural History Survey
Preliminary geology of Iowa County, Wisconsin
Plate 2

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2010



EXPLANATION

Quaternary deposits

Wisconsin River lowlands in northern part of Iowa County. Deposits exceed 60 m in thickness and overlie undifferentiated Cambrian sandstone.

sm Modern stream sediment. Primarily sand or slightly gravelly sand on modern valley bottoms; most deposited during last part of the Holocene; overlain by thin peat and thin silty overbank sediment in many places; includes some premodern valley-side fans of fluvial and slope sediment.

Paleozoic bedrock units

Og Galena Formation of Sinnipee Group. Drab yellowish-gray to brown dolomite and dolomitic limestone with some yellow-gray shale partings. Coarsely granular to crystalline, noticeably vuggy in outcrop. Medium to thick bedded. Laterally extensive chert beds in lower parts of the formation.

Od Decorah Formation of Sinnipee Group. Dark gray and blue argillaceous limestone and olive-green to brown shale beds. Overall, thin with some wavy bedding, about 9 m thick.

Op Platteville Formation of Sinnipee Group. Generally fine-grained light-gray dolomite. Somewhat argillaceous becoming sandy near base. Upper part of formation generally thin and wavy bedded; lower part is browner and medium to thick bedded. Somewhat more fossiliferous than Galena Formation.

Oa Ancell Group (St. Peter Formation). Basal Readstown Member is a mixture of sandstone, chert, shale, and dolomitic sandstone. Extremely variable thickness from absent to more than 60 m thick. Overlain by Tonti Member which is fine- to medium-grained, well-sorted sandstone with occasional thin green shale layers. White, red, to yellow. Generally poorly cemented. Overlain by the Glenwood Member, a dolomitic, poorly sorted sandstone to sandy dolomite with thin dark green shale layers. Glenwood Member absent in some areas and generally less than 1.5 m thick. Ancell Group deposited on major cratonic unconformity and ranges from 0 to more than 90 m thick.

Opc Prairie du Chien Group (Shakopee and Oneota Formations). Light brown to yellow to light reddish-brown dolomite, sandy dolomite, and dolomitic sandstone. Commonly karstified; many cavities filled with dark brown to red silt and clay sediment. Local vuggy, oolitic, and cherty zones or irregular beds. Contact with overlying Ancell Group is very irregular.

Cj Jordan Formation. White, brown, to red-brown fine- to coarse-grained quartz sandstone. Fine-grained parts of formation can be hummocky to trough cross-stratified.

Cal St. Lawrence Formation. Light yellow-brown fine-grained dolomitic sandstone, siltstone, and some thin shale beds. Generally thin-bedded.

Ctc Tunnel City Formation. Light brown to distinct glauconitic (green) fine-grained sandstone with green-gray shale partings. Commonly cross-stratified and extensively bioturbated.

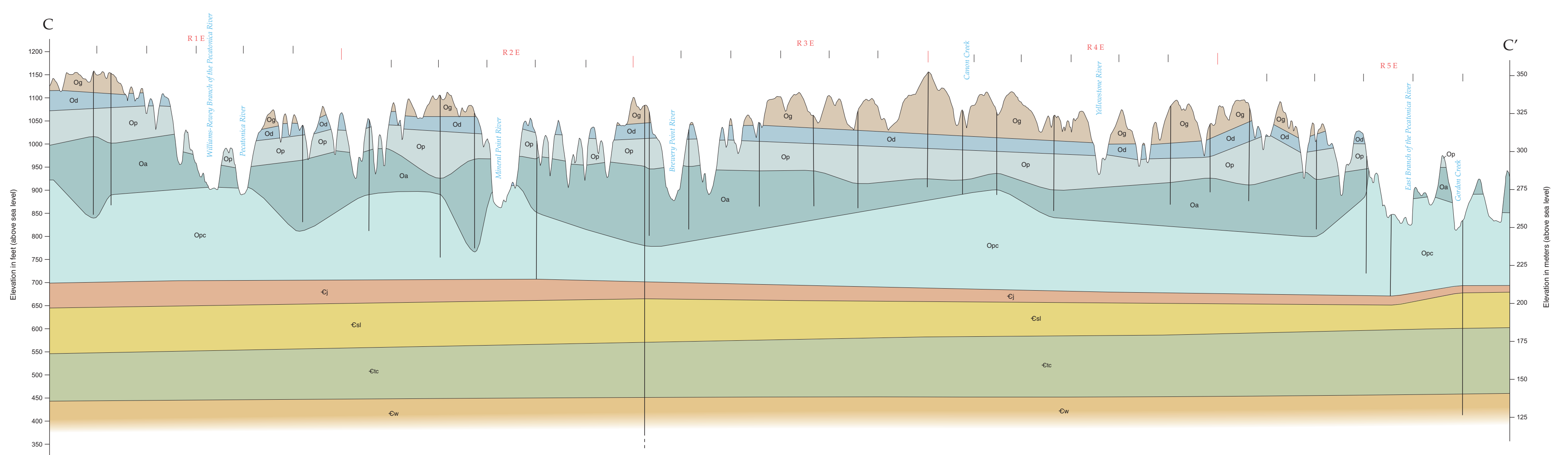
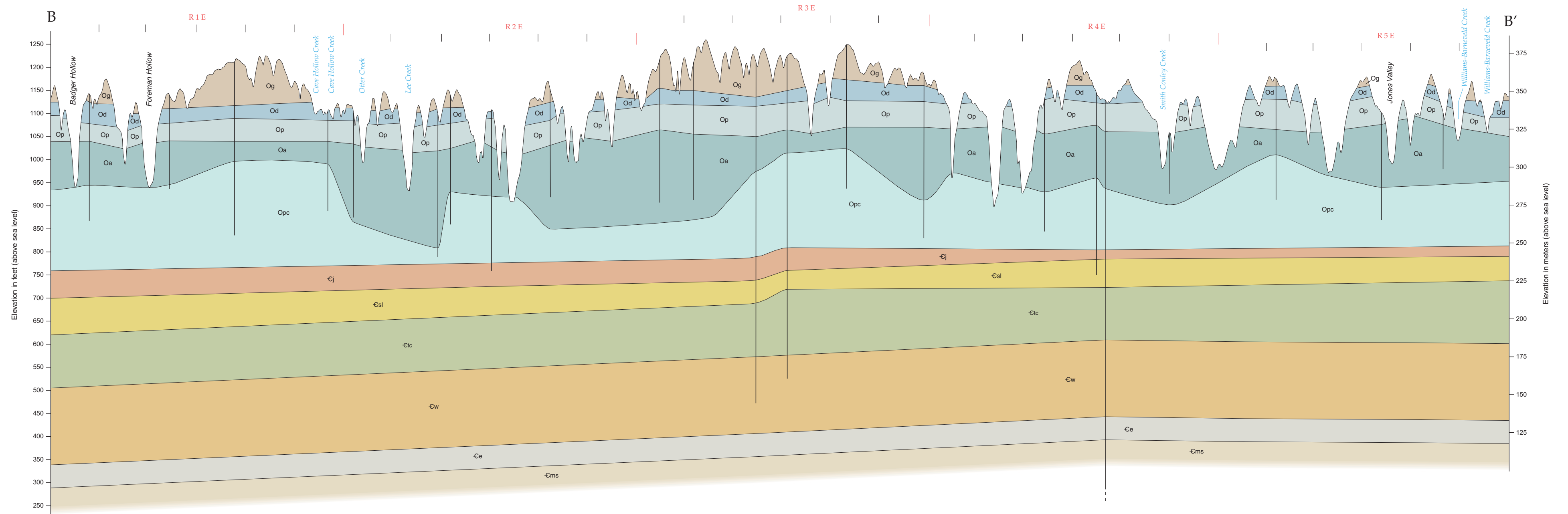
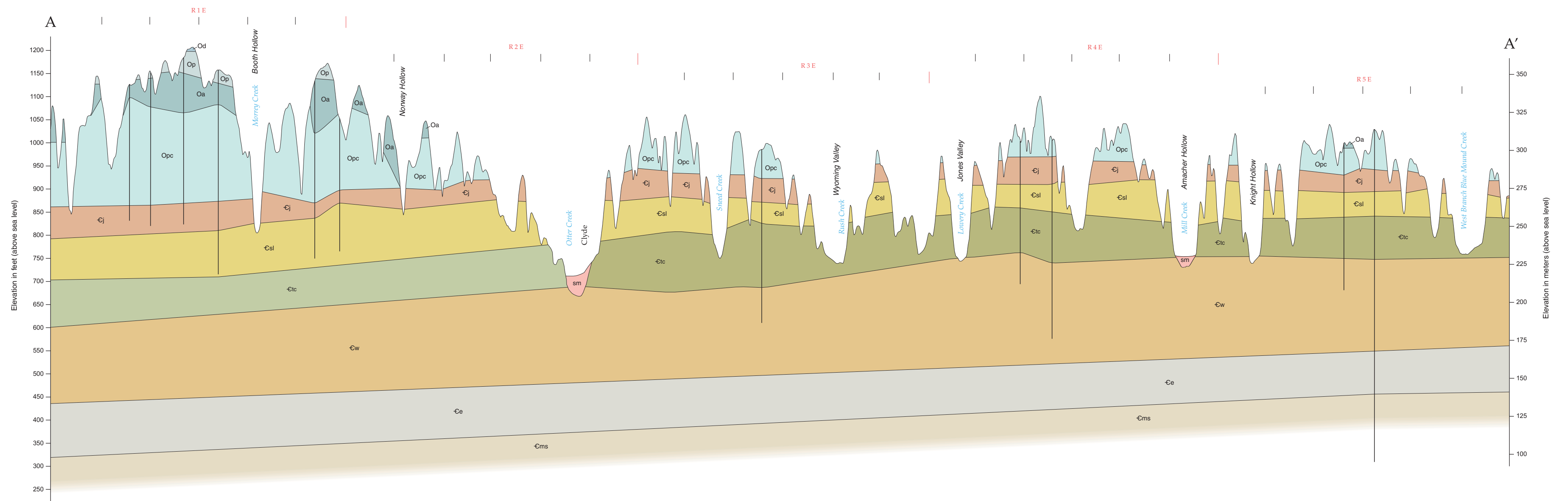
Cw Wonowoc Formation. Light brown fine- to coarse-grained quartzose sandstone. Trough cross-stratification common. Contacts with overlying and underlying units are gradational.

Ce Eau Claire Formation. Light- to dark-gray shale. Occasional thin beds of very fine- to fine-grained dolomitic sandstone and siltstone. Fossil fragments and trace of pyrite throughout the shale. Sandstone and siltstone are locally slightly glauconitic. Based on limited well data, sandstone beds appear to increase in thickness in northeastern part of the county.

Cms Mount Simon Formation. Fine- to coarse-grained sandstone. Mostly light gray or light brown. Dolomite cement, occasionally very well cemented. Some dark-brown sandy dolomite beds occur at varying intervals and thicknesses. Traces of fine white silica, pyrite, and gray shale throughout entire unit.

SYMBOLS

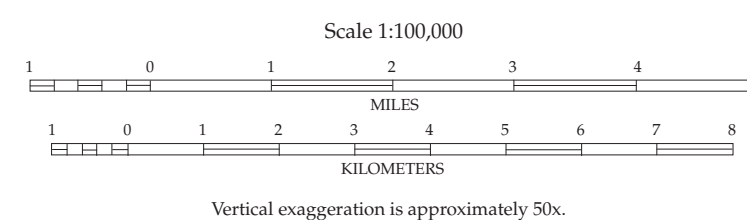
Approximate location of wells used to compile sections.



These cross sections represent work performed by the Wisconsin Geological and Natural History Survey and are released to the open files in the interest of making the information readily available. These cross sections have not been edited or reviewed for conformity with Wisconsin Geological and Natural History Survey standards and nomenclature.

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PLATE 2. PRELIMINARY GEOLOGIC CROSS SECTIONS OF IOWA COUNTY, WISCONSIN.



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