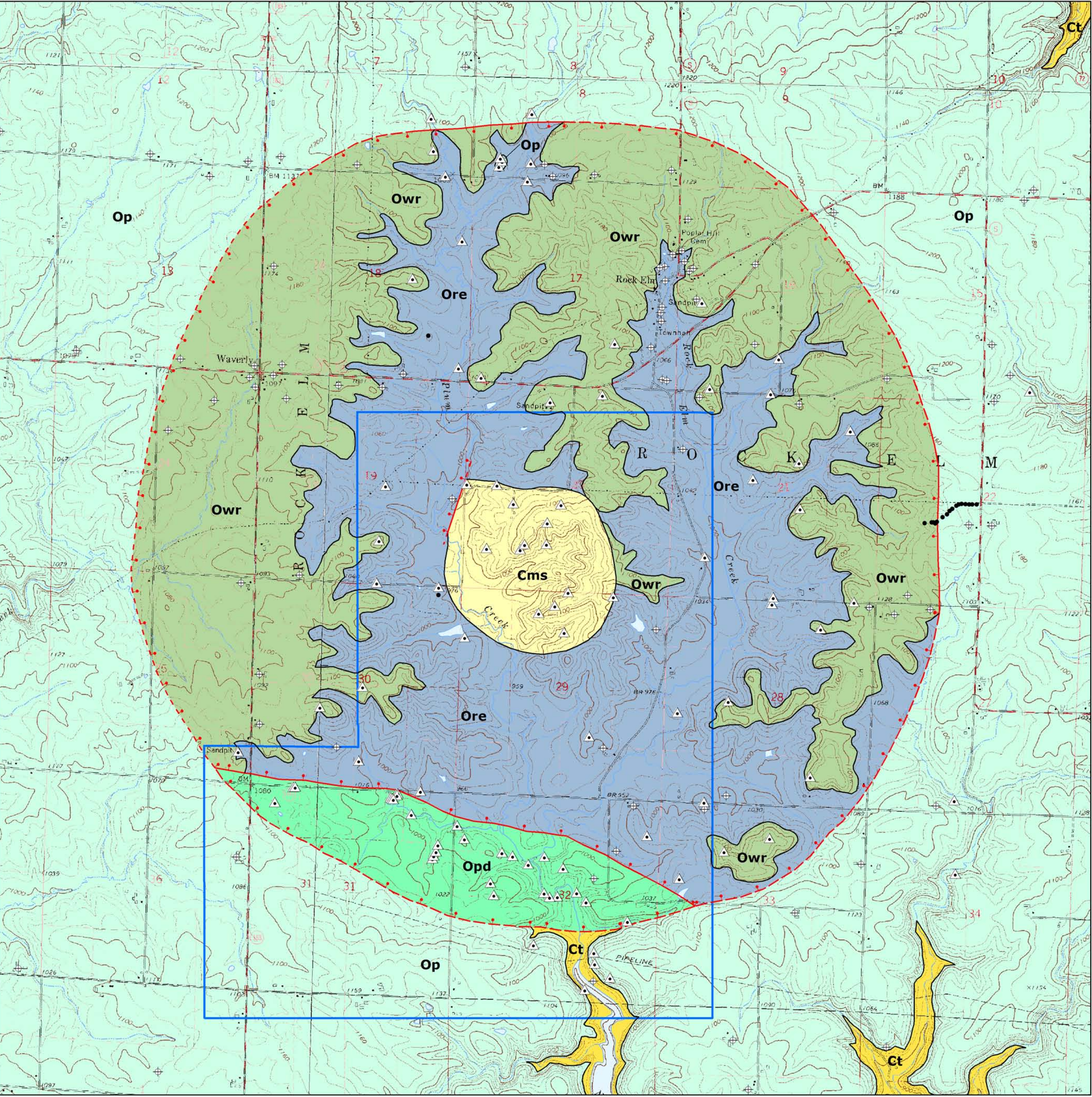


Geology of the Rock Elm Complex
Pierce County, Wisconsin
William S. Cordua and Thomas J. Evans



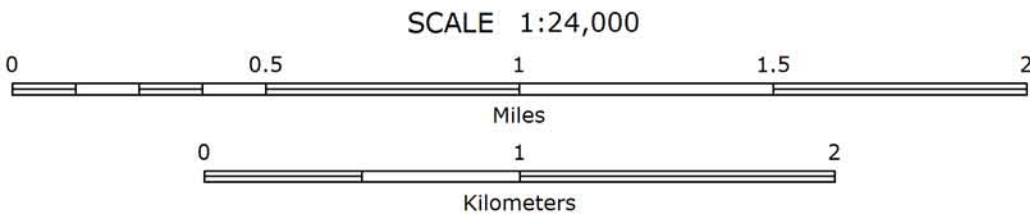
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**Wisconsin Geological and Natural History Survey
Open-File Report 2007-02**

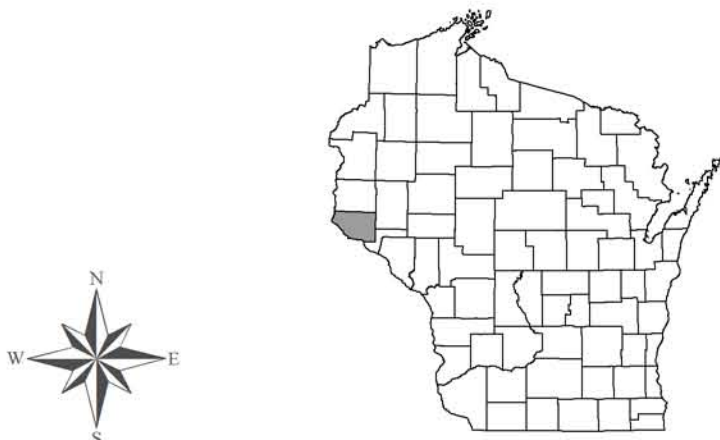
This map is part of a three-year project funded by STATEMAP, the state component of the National Cooperative Geologic Mapping Program of the U.S. Geological Survey.

This map represents work performed by the Wisconsin Geological and Natural History Survey and colleagues and is released to the open files in the interest of making the information readily available. This map has not been edited or reviewed for conformity with Wisconsin Geological and Natural History Survey standards and nomenclature.



Wisconsin Transverse Mercator Projection
1991 Adjustment to the North American Datum of 1983 (NAD 83/91)
Contour Interval 20 ft

Map base from Digital Raster Graphic data (U.S. Geological Survey and Wisconsin Department of Natural Resources).



EXPLANATION

- Owr** Washington Road sandstone (informal, Middle Ordovician)
Includes just over 40 ft of medium-bedded, very fine-grained feldspathic sandstone with thin clay layers along bedding planes, a friable, white, massive feldspathic arenite, and a medium-bedded, ferruginous feldspathic sandstone. Lower contact with Rock Elm shale is gradational over several feet.
- Ore** Rock Elm shale (informal, Middle Ordovician)
Over 90 ft of gray, green, and brown noncalcareous shales interbedded with fine-grained, silty feldspathic sandstone. Thin beds of sandstone range from thinly laminated to massive.
- Op** Prairie du Chien Group (Early Ordovician)
(Shakopee and Oneota Formations, undivided)
Opd Light brown, gray-brown, and yellow dolomite, sandy dolomite, and dolomitic sandstone. Oneota Formation is approximately 140 ft thick, and Shakopee Formation varies from 45 to at least 80 ft thick. Locally silicified and commonly vuggy; larger solution cavities partially filled with brown, fine-grained sediment are common. Generally flat-lying strata, except where highly disrupted in area of Rock Elm Complex (unit Opd).
- Ct** Trempealeau Group (Late Cambrian)
(Jordan and St. Lawrence Formations, undivided)
Yellow-brown to white sandstone, gray siltstone, and minor gray shale. Friable to well cemented, very fine- to coarse-grained quartzose sandstone and siltstone. Gradational lower contact with Tunnel City Group and sharp upper contact with Prairie du Chien Group. St. Lawrence Formation (Lodi Member): dolomitic siltstone and very fine-grained sandstone approximately 30 ft thick. Jordan Formation (Norwalk and Van Osler Members): fine- to coarse-grained sandstone, 80 to 90 ft thick. Finer-grained sandstones are commonly micaceous.
- Cms** Elk Mound Group; Mount Simon Formation (Late Cambrian)
Occurs as outcrops of coarse quartz sandstone, dipping up to 20° radially outward from a central area (Rock Elm Complex) and includes scattered, discontinuous blocks, some of which show evidence of intense deformation and shocked texture (hachured area). Includes discontinuous strings and lenses of quartz pebbles, coarse and fine breccia composed of fragments of quartzite, metamorphic textures, and prophyritic and nonprophyritic felsites. Undeformed strata present in subsurface in Pierce County outside of Rock Elm Complex.

SYMBOLS

- ▲ Outcrop data point
● Core data point
⊕ Water-well data point
↘ Inclined bedding
⊕ Horizontal bedding

Geologic Contacts

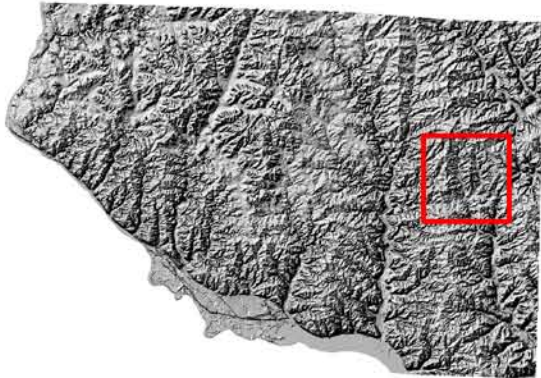
- Definite
Position accurate to +/- 10 ft elevation.
- - - Approximate
Position accurate to +/- 20 ft elevation.
- - - Inferred
Position less accurate due to limited data. Position of line based on geologic inference and judgment of the authors.

Faults

Ball and bar symbol on downthrown side of fault.

- Definite
Position accurate to +/- 100 ft.
- - - Approximate
Position accurate to +/- 250 ft.
- - - Inferred
Limited data. Position of line based on geologic inference and judgment of the author.

Pierce County, Wisconsin



Detail of Central Uplift and Southern Fault Block

