

TITLE: The Flambeau Quartzite

LOCATION: Flambeau Ridge, sections 1, 2, 11, and 12, T.32N., R.7W., and sec. 6, T.32N., R.6W., Chippewa County

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DATE: September 1974 from field reconnaissance, July 1974

SUMMARY OF FEATURES:

The Flambeau Quartzite contains numerous beds of rounded quartz pebbles and smaller, angular clasts of more locally-derived slaty iron formation. Cross bedding and ripple marks indicate shallow-water deposition. The quartzite is thrown into a tight, west-northwest-plunging syncline. Contact and structural relations of the unit are obscured by glacial drift. Erratics on the ridge summit indicate that ice passed over it.

DESCRIPTION:

LITHOLOGY AND PROVENANCE

Rounded, white quartz pebbles with a maximum diameter of about 12 cm. are mixed with angular to subangular, smaller clasts of slaty iron formation. Many of the conglomerate beds are only one pebble layer thick. Conglomerate in the lowest visible part of the formation (Loc. C) is rich in angular iron formation clasts and shaly, feldspathic matrix. With diminution in relative abundance of iron formation clasts creates a question about the mechanism of deposition. The relative angularity of the iron formation clasts suggests a nearby source. The quartz pebbles may have been reworked. More work is needed on this problem.

A spectacular outcrop of the quartzite can be seen at Loc. B, where a 6-meter bed of conglomerate overlies cross-bedded, purple quartzite and granule metaconglomerate. The outcrop has slabbed off along bedding in these units.

STRUCTURE

Cross bedding provided a reliable top-indicator in most outcrops. Available field data indicate that the quartzite is tightly folded into a syncline which plunges steeply west-northwest. Most of Flambeau Ridge is an exposure of the south limb of this fold.

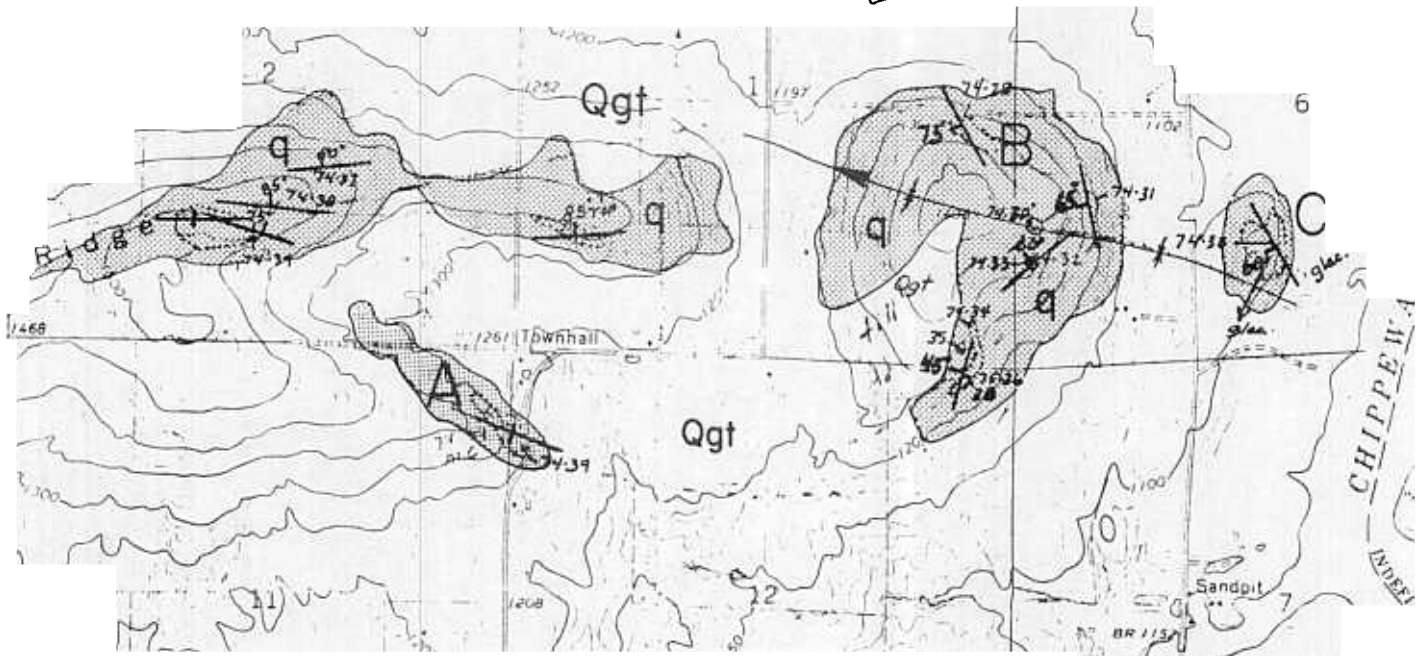


Figure -- Geologic map of Flambeau Ridge showing locations of major geologic interest (A, B, and C).

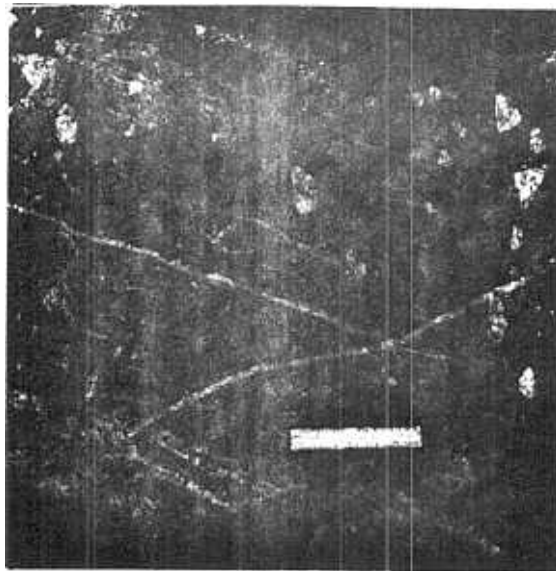


Figure 2 -- Flambeau quartzite metaconglomerate at Location A. Note stratification and dark clasts of banded iron formation.