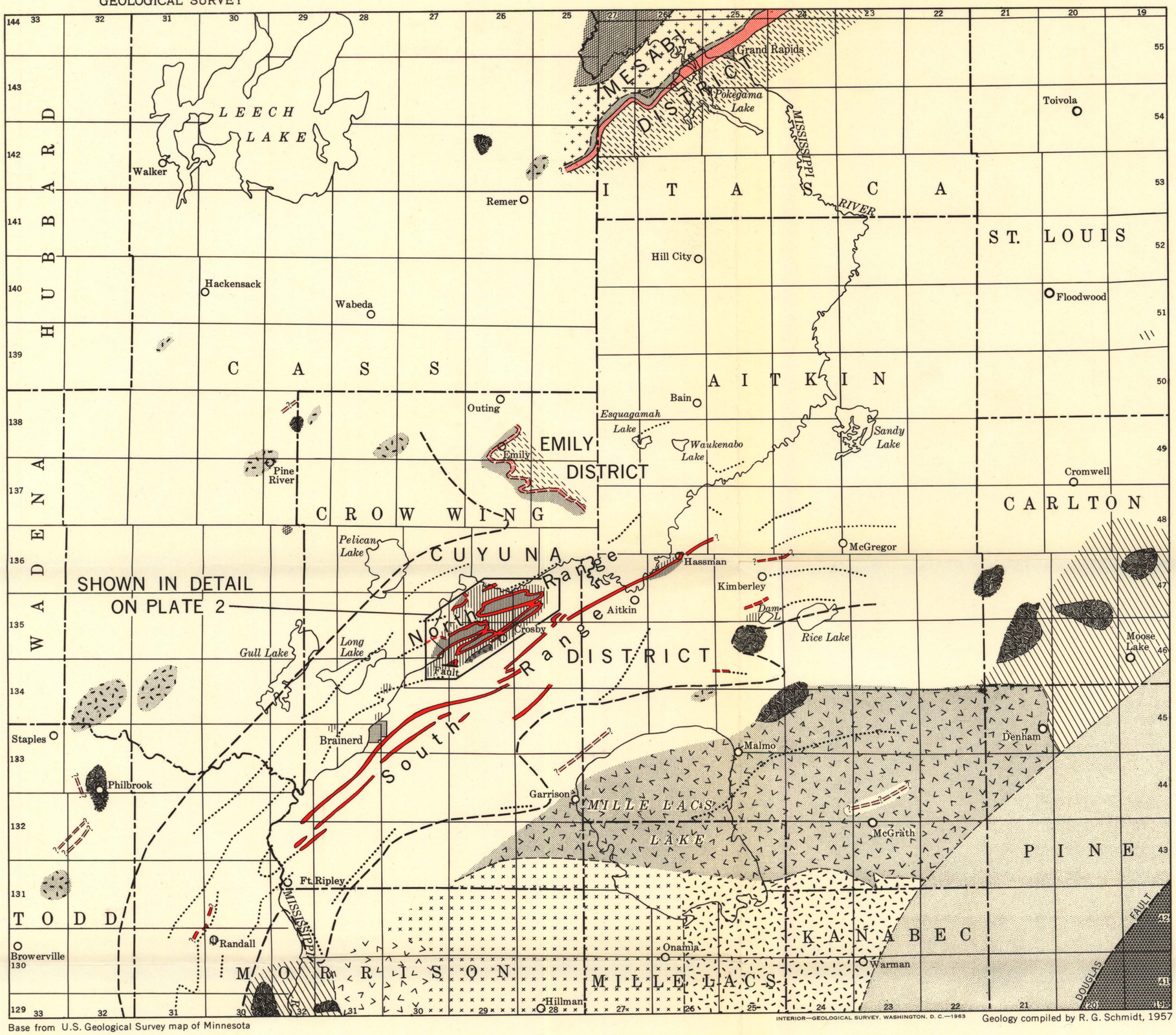


Base from U.S. Geological Survey map of Minnesota

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1963

Geology compiled by R. G. Schmidt, 1957

REGIONAL BEDROCK GEOLOGIC MAP OF CENTRAL MINNESOTA

8 0 8 16 24 MILES

EXPLANATION

PRECAMBRIAN

Upper Precambrian — Keweenawan series

- Hinckley sandstone

Middle Precambrian — Animikie group

MESABI AND EMILY DISTRICTS
- Virginia slate
- Biwabik iron-formation; width locally exaggerated
- Pokegama quartzite

CUYUNA DISTRICT
- Rabbit Lake formation
- Trommald formation; width generally exaggerated
- Mahnomen formation

Lower Precambrian — Keewatin series

- Ely greenstone

Position Unknown

- Thomson formation of Spurr (1894)
- Iron-formation

IGNEOUS ROCKS

Upper Precambrian — Keweenawan series

- Mafic extrusive rocks
- Mafic intrusive rocks

Middle (?) Precambrian

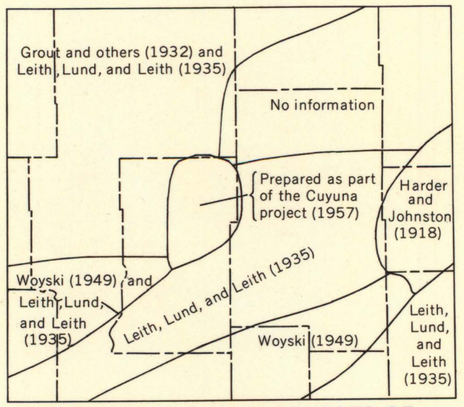
- Mafic intrusive rocks

Lower or Middle Precambrian

- Granitic intrusive rocks, unnamed
- Giants Range granite
- Freedhem tonalite of Woyski (1949)
- Hillman gneissoid biotite tonalite of Woyski (1949)
- Warman quartz monzonite of Woyski (1949)
- McGrath gneiss of Woyski (1949)

General outline of Cuyuna synclinorium

Line of high total magnetic intensity
From maps published by the U.S. Geological Survey in Geophysical Investigations series. Shown within and southeast of Cuyuna synclinorium only



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