

Structural geology of the Aiken River deformation zone, Manitoba (parts of NTS 64A1 and 2)

Legend

- 13** Protomylonite and mylonite; medium to fine grained, predominantly of granitic to granodioritic composition and locally mafic, with dextral, southeast-side-up fabric
- 12** Granitic, granodioritic, tonalitic and amphibolitic gneiss
- 11** Garnet- and staurolite-bearing semi-pelitic schist
- 10** Mafic dikes; undeformed to weakly deformed, fine to medium grained
- 9** Mylonite and protomylonite; fine to medium grained, granitic to granodioritic and locally mafic, decimetre-scale layers of chloritic schist, showing strong penetrative dextral, north-side-up fabric
- 8** Granitic gneiss with dextral, north-side-up shear bands
- 7** Tonalite to granodiorite gneiss; hornblende/biotite-bearing with dextral, north-side-up shear bands; amphibolite rafts present
- 6** Hornblende/biotite tonalite to granodiorite gneiss with amphibolite rafts
- 5** Clotted tonalite to granodiorite with amphibolite rafts; contains clots of hornblende, commonly retrogressed to biotite or chlorite
- 4** Lit-par-lit gneiss of unit 3 with open to close folds
- 3** Lit-par-lit gneiss
- 3a** Lit-par-lit gneiss consisting of centimetre- to metre-scale layers of granitic to granodioritic gneiss; amphibolite rafts present
- 3b** Lit-par-lit gneiss, fine grained, porphyroblastic
- 2** Layered amphibolite, locally with hornblende-plagioclase-hornblende selvages
- 1** Mafic granulite with melt layers; garnet-bearing, retrogressed under amphibolite facies metamorphism

Geology by:
Y.D. Kuiper¹ and S. Lin¹

¹ Department of Earth Sciences, University of Waterloo, Waterloo, Ontario N2L 3G1



Logistical and financial support for this project was provided by Manitoba Hydro.

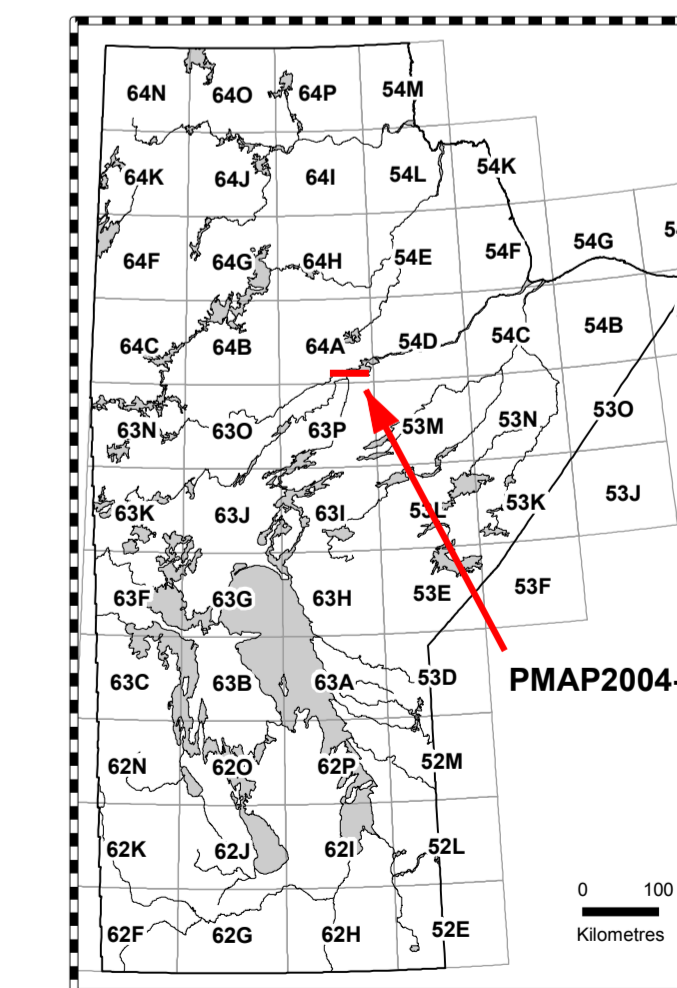
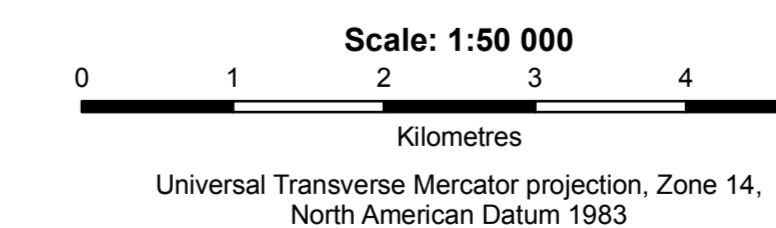


Cartography by P. Lenton and E. Truman

Published by:
Manitoba Industry, Economic Development and Mines,
Manitoba Geological Survey, 2004.

This map is a provisional summary of work carried out during the summer field season and is produced directly from the geologist's manuscript. It is not to be regarded as a final interpretation of the geology of the area.

SUGGESTED REFERENCE:
Kuiper, Y.D. and Lin, S. 2004: Structural geology of the Aiken River deformation zone, Manitoba (parts of NTS 64A1 and 2); Manitoba Industry, Economic Development and Mines, Manitoba Geological Survey, Preliminary Map PMAP2004-3, scale 1:50 000.



Symbols

- Foliation: gneissosity, mylonitic foliation
- Axial planar foliation: post-gneissosity, pre-mylonitic foliation
- Shear zone: dextral, sinistral, sense unknown
- Minor fold axis: S-asymmetric, Z-asymmetric, symmetric or symmetry unknown
- Lineation: stretching, intersection
- Dike: mafic, felsic
- Geological contact: approximate, assumed
- Limit of mapping
- Building
- Runway
- Road
- Cut line
- Trail
- Reef