MANITOBA
DEPARTMENT OF ENERGY AND MINES
MINERAL RESOURCES DIVISION

LEGEND

Post Hudsonian

- 33 — Diabase

Hudsonian Intrusive and Volcanic Rocks

- 32 — Pink porphyritic quartz monzonite; 32a) pink and/or white granite pegmatite; 32b) pink fluorite-bearing quartz monzonite; 32c) White fluorite-bearing quartz monzonite; 32d) Red granite, coarse grained to pegmatitic ± fluorite; 32e) Quartz-feldspar porphyry
- 31 — Quartz monzonite, medium- to coarse-grained, massive to foliated ± aplite ± pegmatite zones
- 31a,b,c,d — 31a) Hybrid quartz monzonite; 31b) Pink aplite ± hornblende; 31c) Well foliated biotite ± magnetite granite gneiss; 31d) Hybrid gneiss
- 30 — White granite to trondhjemite, medium grained, cordierite-bearing ± tourmaline; 30a) Porphyritic white granodiorite

Aphebian and Possible Archean

SEQUENCE I

- 20 — Meta-arkose; derived arkosic gneiss with metatexite
- 19 — Feldspathic quartzite with faserkiesel of muscovite-sillimanite-quartz
- 18 — Quartzite ± andradite ± diopside ± epidote
- 17 — Calc-silicate rocks; 17a) Marble ± quartz ± tremolite; 17b) Albite-pyroxene rock
- 16 — Biotite psammite gneiss ± calc-silicate lenses

SEQUENCE II

- 29 — "Churchill quartzite"

GREAT ISLAND GROUP

- 28 — Metasiltstone and meta-argillite
- 27 — Metagreywacke
- 27a — (North Knife River) Interlayered red and/or green metagreywacke and green phyllite
- 26 — Garnet amphibole schist (iron formation) ± pyrrhotite ± magnetite; 26a) Black pyritic meta-argillite ± black acicular amphibole-garnet
- 25 — (North Knife River) Black meta-argillite with quartz pebbles
- 24 — Dolomitic marble ± quartz ± clinochlore
- 23 — (Tadoule Lake) Metaconglomerate with muscovite-biotite-quartz siltstone matrix with quartzite clasts; interlayered grey siltstone with pebble beds
- 22 — Quartzite and interlayered pale green phyllite to biotite-muscovite schist ± garnet; 22a) Grey to grey-green phyllite ± andalusite ± biotite poikiloblasts
- 21a — Conglomerate oligomictic
- 21b — Conglomerate polymictic
- 15 — Metagabbro in part noritic; metabasic rocks

Seal River Volcanic Rocks

- 14 — Quartz porphyry
- 13 — Pink to grey, very fine grained feldspar porphyry
- 12 — Ultramafic and serpentinite
- 11 — Gabbro
- 10 — Granodiorite to porphyritic quartz diorite

Seal River Intrusive Rocks

- 6 — Semi-pelitic paragneiss to metatexite ± muscovite ± cordierite ± garnet ± sillimanite ± andalusite ± hypersthene; 6a) Semi-pelitic paragneiss to schist and interlayered, impure quartzite; 6b) Impure quartzite to quartzite; 6c) Augen gneiss; 6d) Biotite–feldspar gneiss with granodiorite *lits*
- 9a — Conglomerate, volcanic derived
- 9b — Conglomerate and greywacke
- 9c — Metasiltstone (± uvarovite)
- 8 — Amphibolite
- 7a,b,c,d — 7a) Andesite and minor basalt; 7b) Interlayered tuff and pillowed andesite; 7c) Intermediate tuff, lapilli tuff and interlayered siliceous metasedimentary rocks, local rhyodacite and andesite flows; 7d) Rhyolite to rhyodacite

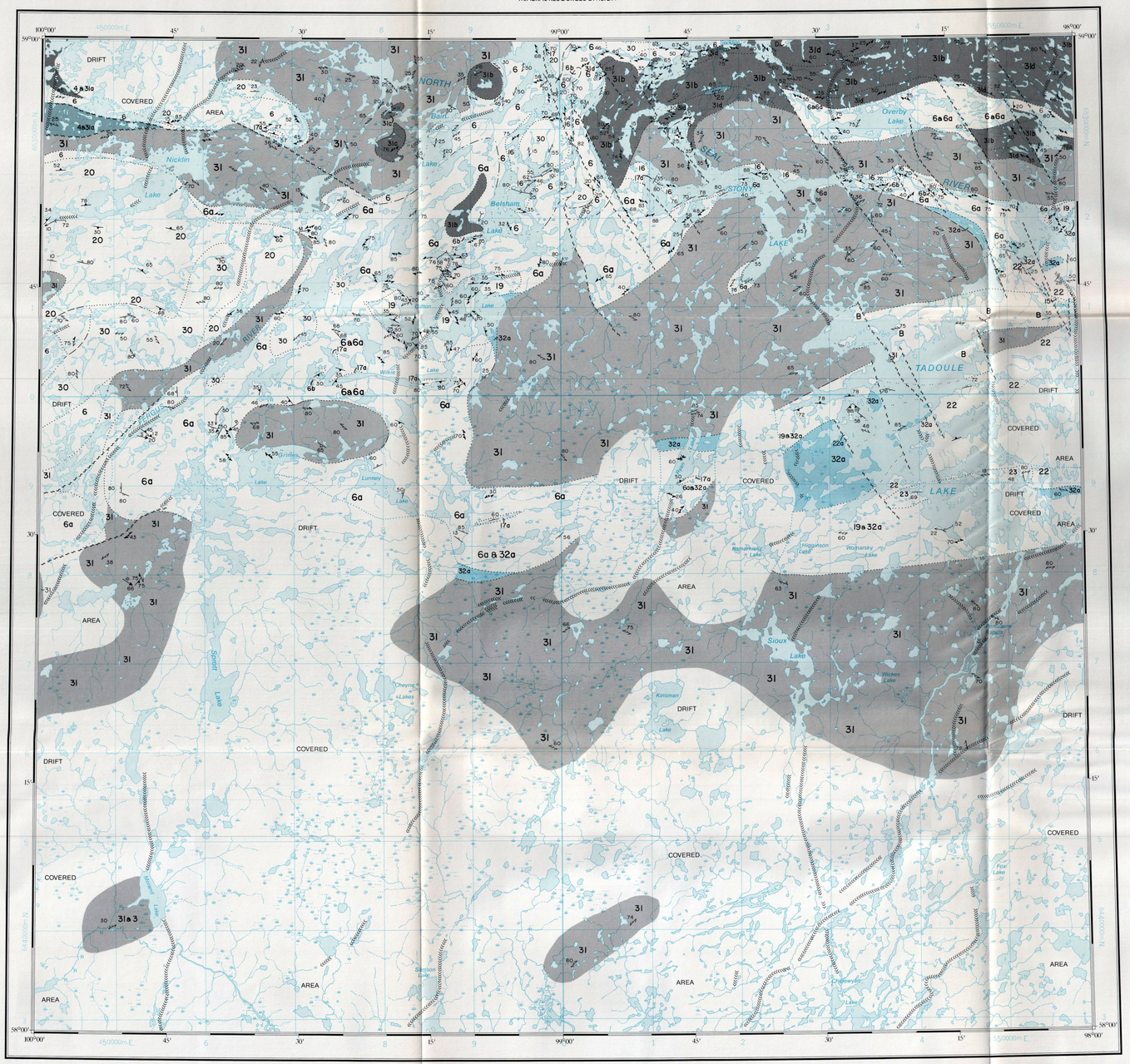
Archean and Probable Archean Rocks

- 5 — Foliated quartz monzonite
- 4 — Foliated alaskite
- 3 — Metadiorite to amphibolite and magnetite-biotite-hornblende schist
- 2a,b,c — 2a) Hypersthene-quartz diorite; 2b) Hypersthene trondhjemite; 2c) Hypersthene-quartz monzonite (monzocharnockite)
- 1 — Hypersthene gneiss

Rocks of Uncertain Affinity

- A — Grey tonalitic to granodioritic gneisses
- B — Foliated to lineated biotite granodiorite to tonalite
- C — Granodiorite diatexite to biotite metatexite ± garnet
- D — Amphibolite

Units occurring on this map are indicated in heavy type



Scale 1:250 000

KILOMETRES 5 0 5 10 15 20 KILOMETRES
MILES 5 0 5 10 15 MILES

MAP GR80-9-2

TADOULE LAKE

SYMBOLS

- Geological boundary (defined, approximate, assumed, underwater, gradational)
- Bedding, tops known (inclined, vertical, overturned)
- Bedding, tops unknown (inclined, vertical, dip unknown)
- Bedding, tops unknown and parallel schistosity (inclined)
- Metamorphic layering (inclined, vertical, amount of dip unknown)
- Inclusion layering (inclined)
- Igneous layering, tops unknown (inclined)
- Igneous layering, tops unknown (inclined, dip unknown)
- Pillow, tops known (inclined)
- Pillow, tops unknown (inclined)
- Metamorphic layering and parallel gneissosity (inclined, vertical, amount of dip unknown)
- Metamorphic layering and parallel schistosity (inclined)
- Gneissosity (inclined, vertical, dip unknown)
- Schistosity (inclined, vertical, dip unknown)
- Cataclastic foliation (inclined)
- Fracture cleavage – strain slip cleavage (inclined)
- Mineral lineation (plunge indicated)
- Boudin axes (inclined)
- Rodding, mullion structure (inclined)
- Minor folds: axis (inclined); axial plane (inclined); symmetry (asymmetrical Z-shaped, asymmetrical S-shaped, symmetrical)
- Fault (assumed, approximate)
- Sheared zone
- Esker
- Limit of drift covered area

Geological Services Branch, Mineral Resources Division, Winnipeg
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Geology by

D.C.P SCHLEDEWITZ 1974-1978

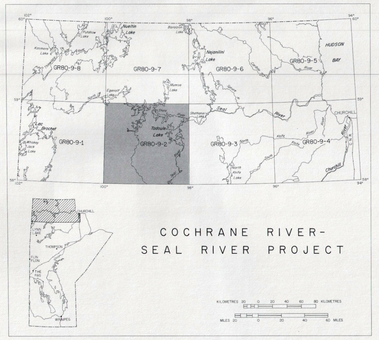
Cartography by

MARK TIMCOE

INDEX MAP

The corresponding sheet of the National Topographic Series is 64-J

The magnetic declination at the centre of the map is approximately 10°54' East (1981) and is decreasing by 17.6' annually



COCHRANE RIVER–
SEAL RIVER PROJECT