

Legend

Post-Sickle intrusive rocks (<1860 to 1800 Ma)

- 22** Quartz porphyry, quartz-feldspar porphyry, tonalite, and diabase
- a) Quartz porphyry, quartz-feldspar porphyry
 - b) Fine-grained tonalite, porphyritic tonalite
 - c) Diabase
- 21** Aplite, aplitic granite, pegmatite, and graphic granite
- a) Aplite, aplitic granite
 - b) Pegmatite, graphic granite
- 20** Granite, granodiorite
- 19** Quartz diorite, tonalite, granodiorite, and dioritic gneiss; migmatite
- a) Hornblende-biotite granodiorite
 - b) Tonalite, quartz diorite
 - c) Layered dioritic and quartz dioritic gneiss
 - d) Migmatite with granitoid rocks and enclaves of units 4 to 9
- 18** Gabbro, minor ultramafic rock, diabase, diorite, and plutonic breccia
- a) Gabbro, minor ultramafic rock
 - b) Diabase
 - c) Diorite
 - d) Plutonic breccia

Sickle group (~1860 to 1830 Ma?)

- 17** Sandstone, greywacke, derived schist and gneiss
- a) Arkosic sandstone, pebbly sandstone
 - b) Muscovite-bearing arkose, pebbly arkose
 - c) Greywacke
 - d) Hornblende-bearing psammitic gneiss, calcareous sandstone
 - e) Biotite-bearing psammitic gneiss
 - f) Quartz-feldspar-muscovite schist, arkosic sandstone
 - g) Sillimanite-bearing arkosic gneiss
- 16** Polymictic conglomerate with quartz-feldspar porphyry, sedimentary, volcanic and granitoid clasts
- a) Conglomerate, arkose matrix
 - b) Conglomerate, greywacke matrix; hornblende

Burntwood group (~1845 to 1835 Ma)

- 15** Greywacke, siltstone, mudstone, and minor volcanic rocks; migmatite
- a) Biotite-garnet-bearing greywacke, migmatite
 - b) Biotite-sillimanite-garnet-bearing greywacke-mudstone, migmatite

Zed Lake greywacke/Ralph Lake conglomerate

- 14** Conglomerate with sedimentary, volcanic and granitoid clasts, greywacke, siltstone, schist, and migmatite
- a) Conglomerate, hornblende greywacke matrix
 - b) Conglomerate, biotite greywacke matrix
 - c) Biotite greywacke, siltstone, minor argillite
 - d) Biotite-garnet-greywacke to mudstone migmatite
 - e) Layered and massive amphibolite, calc-silicate rock

Pre-Sickle intrusive rocks (<1910 to 1870 Ma)

- 13** Granodiorite, granite, minor syenite, aplite, pegmatite, and granite gneiss
- a) Granite, granodiorite
 - b) Pegmatite, aplite
 - c) Syenite
 - d) Aplitic granite
 - e) Granite and granite gneiss, massive to porphyritic; pegmatite and alaskite
- 12** Diorite, quartz diorite, tonalite and granodiorite, and migmatite
- a) Diorite, quartz diorite
 - b) Hornblende-biotite tonalite, quartz diorite
 - c) Granodiorite, tonalite
 - d) Migmatite with granitoid rocks and enclaves of units 3 to 9
- 11** Gabbro, norite, diorite, ultramafic rock, diabase and related amphibolite and schist; gneiss
- a) Norite, gabbro-norite, minor gabbro, hornblende gabbro, biotite-hornblende gabbro
 - b) Pegmatitic hornblende gabbro
 - c) Amphibolite, garnet amphibolite, hornblende gneiss
 - d) Hornblende, biotite hornblende
 - e) Diabase, related amphibolite and schist
 - f) Diorite, biotite diorite
- 10** Hornblende diorite and quartz diorite
- 9** Gabbro and diabase

Structure Symbols

- Bedding: tops known, tops unknown, overturned
- Pillows: tops known, tops unknown, overturned
- Foliation: generation 1, generation 2
- Flow contact: tops known, tops unknown
- Igneous layering, tops unknown
- Gneissosity, generation unknown
- Cleavage, spaced, generation unknown
- Lineation: type unknown, rodding, mineral lineation
- Fold axis, generation unknown: symmetry unknown, symmetric, S-shaped, M-shaped
- Fold axial plane, generation unknown

Wasekwan tectonic collage (1910 to 1860? Ma)

- 8** Sedimentary rocks and paragneiss
- a) Pebbly greywacke, paraconglomerate
 - b) Hornblende greywacke, siltstone
 - c) Biotite greywacke, siltstone, mudstone
 - d) Quartz-rich greywacke
 - e) Siltstone and mafic mudstone
 - f) Mafic mudstone, tuff, greywacke
 - g) Argillite
 - h) Chert
 - i) Porphyroblastic schist
 - j) Iron formation
 - k) Psammitic gneiss
 - l) Semipellitic gneiss
 - m) Pelitic gneiss
 - n) Sillimanite gneiss and schist
 - o) Hornblende-plagioclase-biotite gneiss
 - p) Migmatite
- 7** Conglomerate, pebbly mudstone, and volcanic breccia
- a) Quartz-pebble conglomerate
 - b) Conglomerate with volcanic and sedimentary clasts
 - c) Pebbly mudstone
 - d) Polymictic volcanic breccia, conglomerate

- 6** Rhyolite, hyaloclastite, breccia, tuff, and felsic gneiss
- a) Massive aphyric rhyolite
 - b) Massive porphyritic rhyolite
 - c) Porphyritic breccia
 - d) Hyaloclastite
 - e) Tuff
- 5** Dacite, breccia, tuff, and schist
- a) Massive aphyric dacite
 - b) Massive porphyritic dacite
 - c) Breccia
 - d) Tuff
 - e) Altered dacite, schist

- 4** Intermediate to felsic volcanic and volcanoclastic rocks
- a) Andesite
 - b) Porphyritic dacite
 - c) Intermediate tuff, lapilli tuff
 - d) Pyroclastic breccia
- 3** Mafic and intermediate volcanic rocks, amphibolite, schist and gneiss
- a) Massive porphyritic and aphyric basalt and andesite
 - b) Pillowed basalt and andesite
 - c) Autoclastic breccia
 - d) Polymictic breccia
 - e) Mafic tuff
 - f) Intermediate tuff
 - g) Garnetiferous amphibolite
 - h) Andesite
 - i) Mafic to intermediate schist and gneiss
 - j) Intermediate to felsic schist and gneiss
 - k) Undivided amphibolite and intermediate rocks

- 2** Mafic volcanic rocks, tuff, breccia and amphibolite
- a) Massive basalt
 - b) Pillowed basalt
 - c) Autoclastic breccia
 - d) Porphyritic and aphyric basalt
 - e) Tuff
 - f) Banded amphibolite, breccia
 - g) Mafic porphyry
- 1** Basalt, breccia, hyaloclastite, tuff and amphibolite
- a) Massive basalt
 - b) Pillowed basalt
 - c) Pillow breccia, hyaloclastite
 - d) Tuff
 - e) High-magnesia basalt, tuff, ultramafic rock, amphibolite
 - f) Layered and massive amphibolite, calc-silicate rock

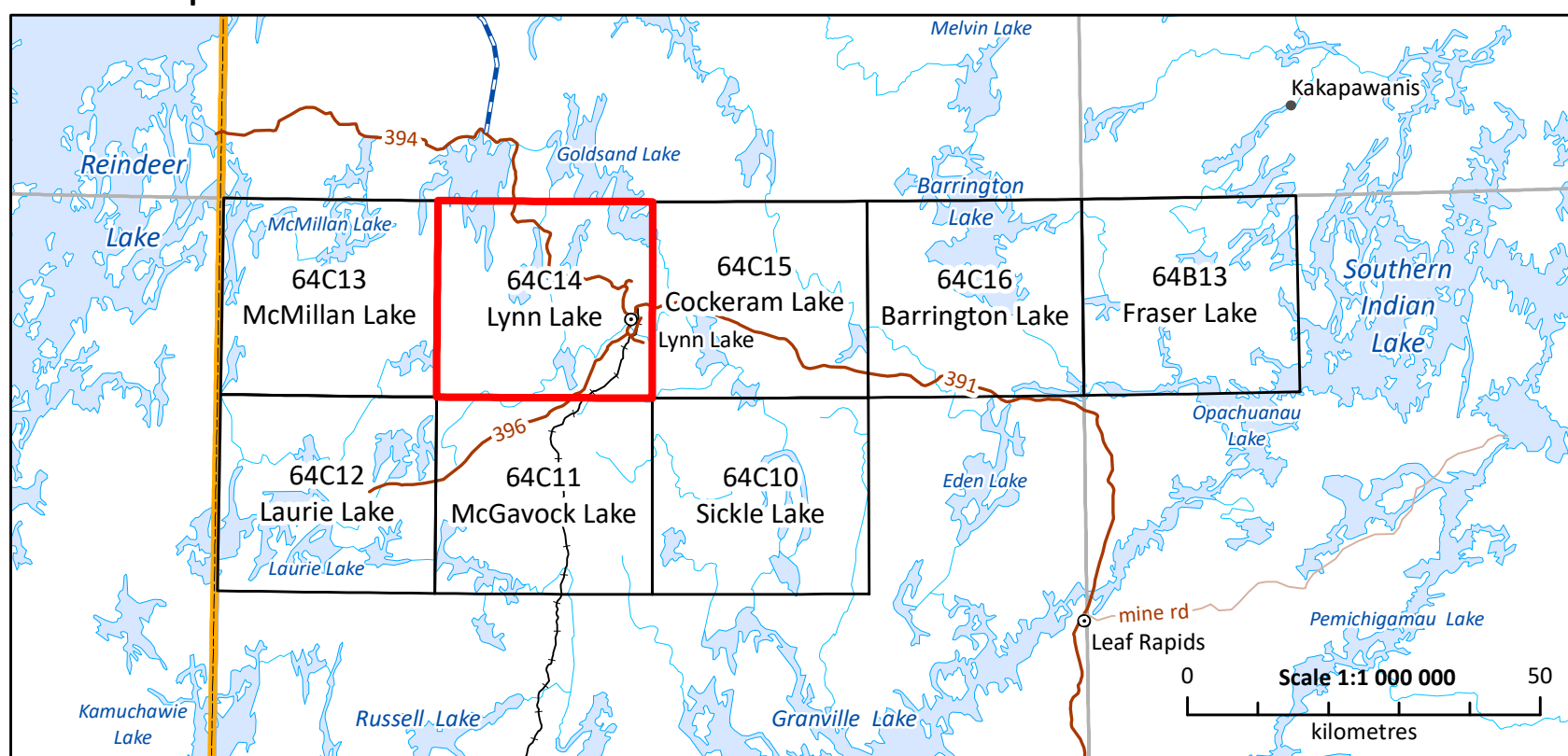
Geological symbols

- Contact: defined, approximate, assumed, assumed gradational, geophysical
- Fault, approximate
- Syncline, approximate: generation 1, overturned
- Anticline, approximate: generation 1, overturned
- Limit of exposure
- Limit of mapping
- Outcrop

Infrastructure symbols

- Road, loose surface: all-weather, winter
- Railway track
- Power line
- Trail

Location Map



References:

Cameron, H.D.M. 1980: McMillan Lake; Manitoba Energy and Mines, Mineral Resources Division, Preliminary Map 1980-1, scale 1:50 000.

Gilbert, H.P. 1993: Geology of the Barrington Lake-Melvin Lake-Fraser Lake area; Manitoba Energy and Mines, Geological Services, Geological Report GR87-3, 97 p. plus 4 maps at 1:50 000 scale.

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Gilbert, H.P., Syme, E.C. and Zwanig, H.V. 1980: Geology of the metavolcanic and volcanoclastic metasedimentary rocks in the Lynn Lake area; Manitoba Energy and Mines, Mineral Resources Division, Geological Paper GP80-1, 118 p.

Gilbert, H.P., Zwanig, H.V. and McGill, B. 1977: Lynn Lake, N.T.S. part of 64C14; Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Preliminary Map 1977-4, scale 1:50 000.

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Zwanig, H.V. 1978: Lynn Lake area; Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Preliminary Map 1978-1, scale 1:100 000.

Published by:

Manitoba Agriculture and Resource Development, Manitoba Geological Survey, 2021

ISBN: 978-0-7711-1518-6

Copies of this map can be obtained from:

Manitoba Agriculture and Resource Development

Manitoba Geological Survey, Publication Sales

360-1395 Ellice Avenue

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Phone: 204-945-6569

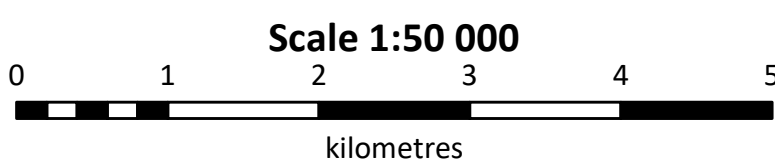
Toll free: 1-800-223-5215

Email: mineinfo@gov.mb.ca

Available for free download at www.manitoba.ca/minerals

Lynn Lake Bedrock Compilation Map 64C14

Lynn Lake, Manitoba (NTS 64C14)



UTM Zone 14, NAD83

Geology by H.P. Gilbert, E.C. Syme and H.V. Zwanig (1980)

Geoscience compilation by P.G. Lenton

GIS/ Cartography by L.E. Chackowsky

Suggested reference:

Manitoba Agriculture and Resource Development 2021: Lynn Lake, Manitoba (NTS 64C14);

Manitoba Agriculture and Resource Development, Manitoba Geological Survey, Lynn Lake

Bedrock Compilation Map 64C14, scale 1:50 000.

