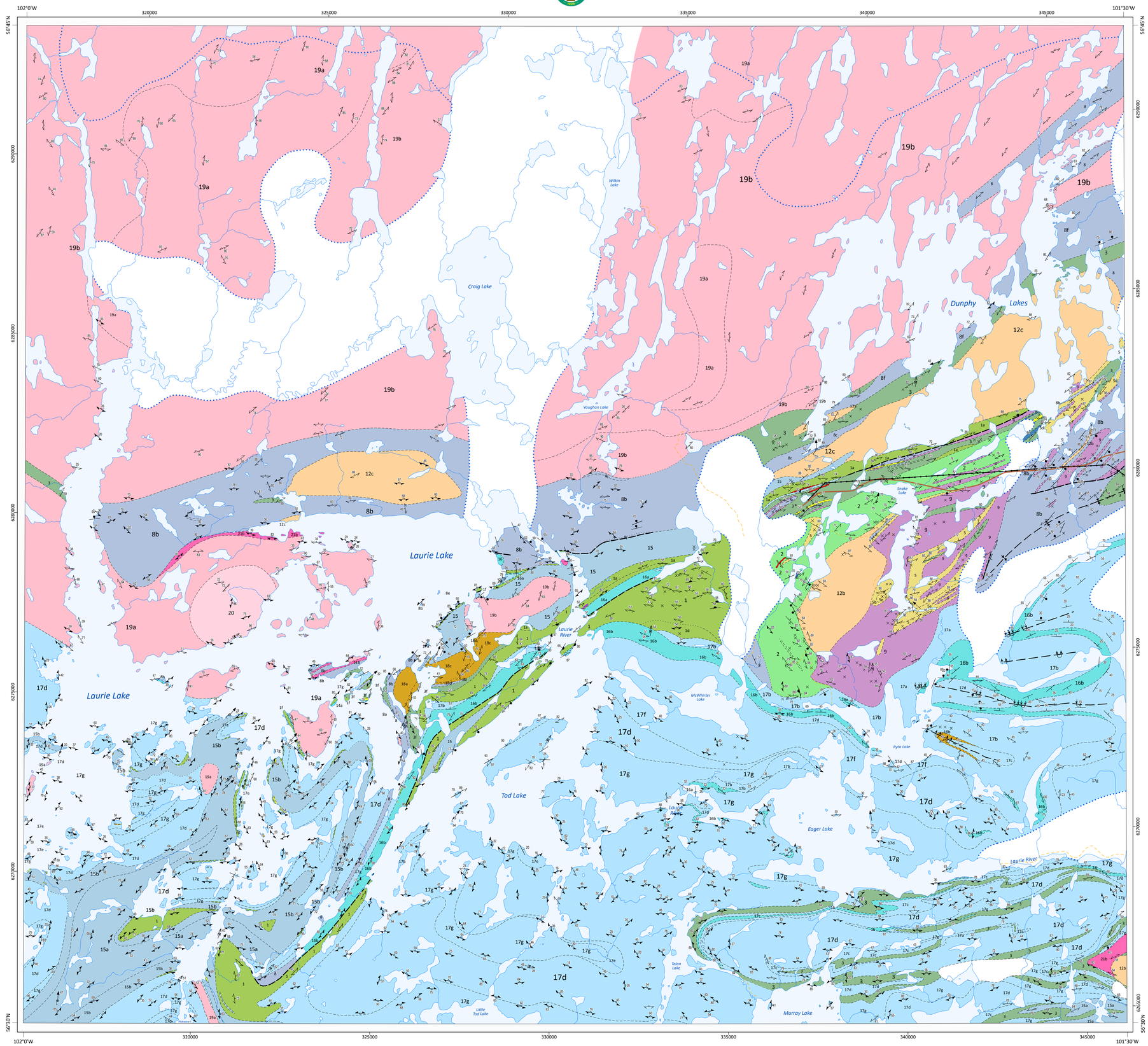


UTM Zone 14, NAD83

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

Geoscience compilation by P.G. Lenton

GIS/Cartography by L.E. Chackowsky

Suggested reference:

Manitoba Agriculture and Resource Development 2021: Laurie Lake, Manitoba (NTS 64C12); Manitoba Agriculture and Resource Development, Manitoba Geological Survey, Lynn Lake Bedrock Compilation Map 64C12, scale 1:50 000.

References:

Cameron, H.D.M. 1980: McMillan Lake; Manitoba Energy and Mines, Mineral Resources Division, Preliminary Map 1980L-3, 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.

Gilbert, H.P. and Syme, E.C. 1976: Lynn Lake; Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Preliminary Map 1976L-2, scale 1:50 000.

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

Gilbert, H.P., Zwanzig, H.V. and McGill, B. 1977: Lynn Lake, N.T.S. part of 64C/14; Manitoba Mines, Resources and Environmental Management, Mineral Resources Division, Preliminary Map 1977L-4, scale 1:50 000.

Syme, E.C. 1985: Geochemistry of metavolcanic rocks in the Lynn Lake Belt; Manitoba Energy and Mines, Geological Services, Geological Report GR84-1, 84 p. plus 1 map at 1:100 000 scale.

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

Published by:
Manitoba Agriculture and Resource Development, Manitoba Geological Survey, 2021
ISBN: 978-0-7711-1617-9

Copies of this map can be obtained from:
Manitoba Agriculture and Resource Development
Manitoba Geological Survey, Publication Sales
360-1395 Ellice Avenue
Winnipeg, MB R3G 3P2 Canada
Phone: 204-945-6569
Toll free: 1-800-223-5215
Email: minesinfo@gov.mb.ca
Available for free download at www.manitoba.ca/minerals

Lynn Lake Bedrock Compilation Map 64C12

Laurie Lake, Manitoba (NTS 64C12)

Scale 1:50 000

0 1 2 3 4 5
kilometres

N

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, gabbronorite, minor gabbro, hornblende gabbro, biotite-hornblende gabbro
- b) Pegmatitic hornblende gabbro
- c) Amphibolite, garnet amphibolite, hornblende gneiss
- d) Hornblendite, biotite hornblendite
- e) Diabase, related amphibolite and schist
- f) Diorite, biotite diorite

10 Hornblende diorite and quartz diorite

9 Gabbro and diabase

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) Semipelitic 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 volcaniclastic 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, hyalocastite, tuff and amphibolite
- a) Massive basalt
- b) Pillowed basalt
- c) Pillow breccia, hyaloclastite
- d) Tuff
- f) High-magnesia basalt, tuff, ultramafic rock, amphibolite
- g) Layered and massive amphibolite, calcsilicate 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

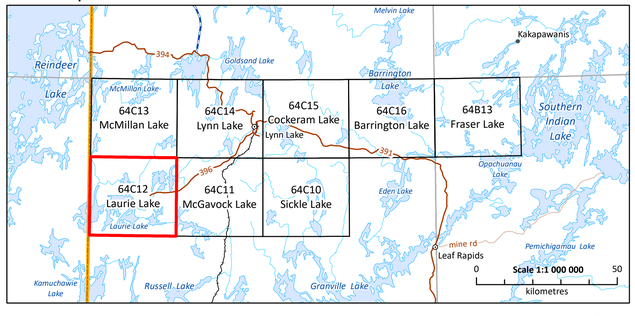
Infrastructure symbols

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

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
- Gneissocity, 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

Location Map



Manitoba