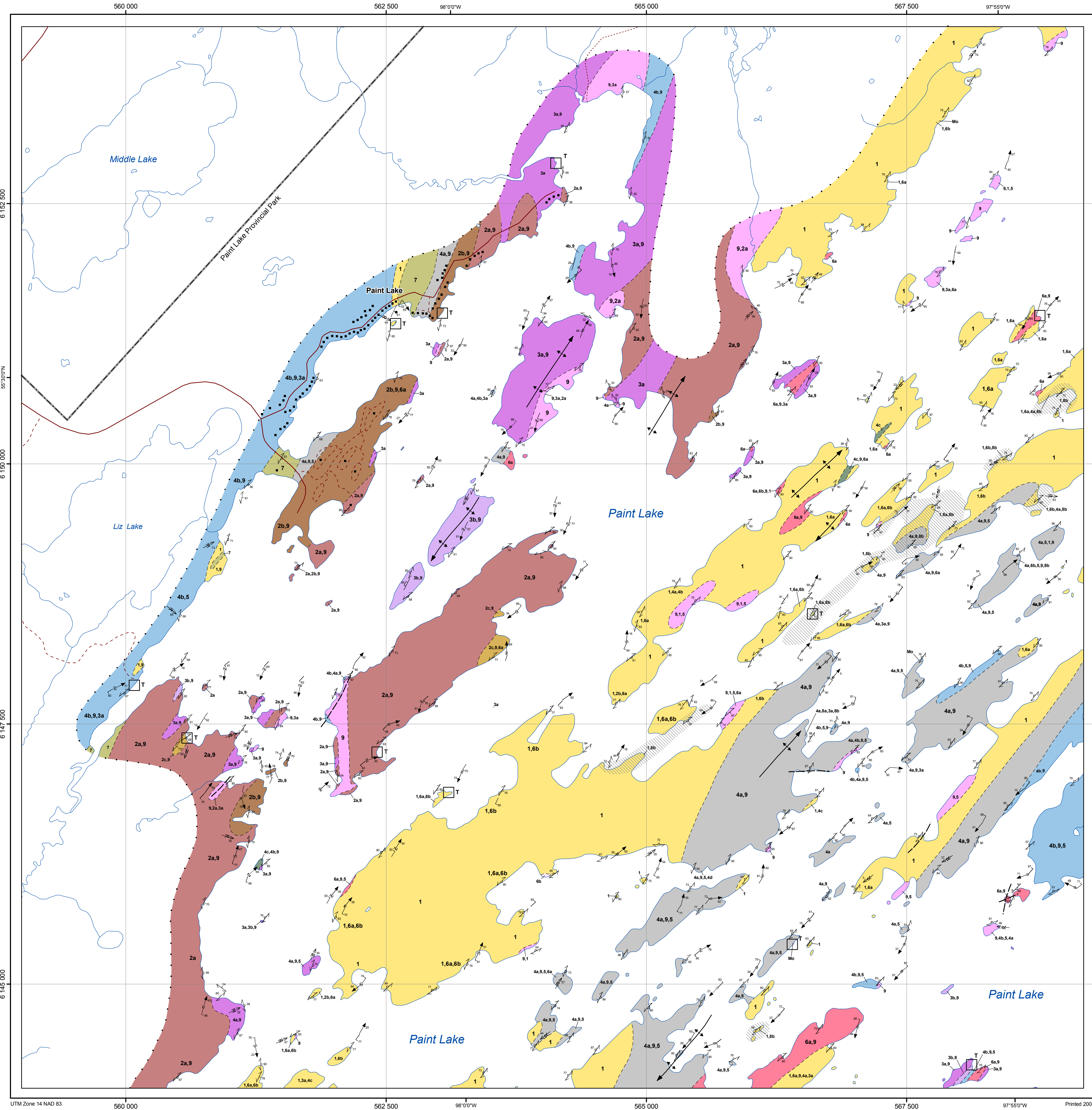




Geology of the west-central Paint Lake area, Manitoba (parts of NTS 63O8, 9, 63P5,12)



Legend

Paleoproterozoic rocks

- 9 Pink pegmatite: dikes and irregular bodies of simple quartz-feldspar pegmatite
- 8 Alkaline igneous suite (not mappable at this scale)
 - 8a White pegmatite: quartz-free pegmatite dikes with 10–20% biotite or clinopyroxene and hornblende, and 3–5% apatite
 - 8b Carbonatite-like dikes: small intrusive bodies of white to pink carbonate, contain abundant apatite and clinopyroxene, and variable amounts of magnetite
- 7 Oswagan Group: exposures consist of Managan Formation quartzite and semipelite, and Thompson Formation calcsilicate

Rocks of uncertain age

- Granitoids
 - 6a Granodiorite: small dikes and larger elongate bodies, contain 10–15% biotite and/or hornblende
 - 6b Leucogranite: small dikes, contain 2–7% biotite
- 5 Plagioclase amphibolite (not mappable at this scale): discontinuous bands and boudins, likely consists of a mixture of Archean and Proterozoic protoliths

Metasedimentary rocks

- 4a Metagreywacke: grades into unit 4b, contains local intercalations of unit 4b and 4c
- 4b Metapsammite: grades into and contains local intercalations of unit 4a
- 4c Iron formation: dominantly silicate facies iron-formation, locally strongly magnetic
- 4d Marble (not mappable at this scale): thin layer in unit 4a, contains abundant serpentinized olivine and minor amounts of a reddish mineral (possibly a humite-group mineral)

Archean rocks

- Layered mafic rocks
 - 3a Layered metagabbro: varying proportions of clinopyroxene, orthopyroxene, garnet, plagioclase, and hornblende with minor quartz; locally interlayered with, and compositional gradational into metapyroxenite
 - 3b Layered leucocratic metagabbro: varying proportions of orthopyroxene, garnet, hornblende, quartz, and plagioclase; < 50% mafic minerals, locally as low as 20% mafic minerals
- Retrogressed enderbite gneiss
 - 2a Retrogressed enderbite biotite gneiss: biotite > hornblende, contains 2–10% orthopyroxene
 - 2b Retrogressed enderbite hornblende gneiss: hornblende > biotite, rarely contains orthopyroxene
 - 2c Two-pyroxene enderbite gneiss: contains 15–20% clinopyroxene and orthopyroxene in roughly equal proportions, and 10–20% biotite
- 1 Multicomponent migmatite: consists of varying proportions of intermixed hornblende gneiss, biotite gneiss, and injections of unit 9, discontinuous bands and boudins of unit 5, and local boudins and blocks of assorted ultramafic rocks

Symbols

Planar structures

- Bedding: tops unknown, upright
- Foliation: generation unknown, 1st, 2nd
- Fold-axial plane: generation unknown
- Igneous layering: tops unknown
- Shear: generation unknown, symmetry unknown

Linear structures

- Fold axis: generation unknown, symmetry unknown
- Fold axis: generation unknown, symmetrical
- Fold axis: generation unknown: asymmetrical Z, S
- L-fabric: mineral lineation
- L-fabric: rodding

- Approximate contacts
- Fault
- Anticline
- Alkali-metasomatized rock
- Molybdenite occurrence
- Type location
- Limit of mapping
- Road
- Limited-use road
- Trail
- Park boundary

Geology by: C.G. Couëslan¹ (2008), location of Oswagan Group rocks from Macek et al. (2006)

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Published by:
Manitoba Science, Technology, Energy and Mines
Manitoba Geological Survey, 2008

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:
Couëslan, C.G., 2008: Geology of the west-central Paint Lake area, Manitoba (parts of NTS 63O8, 9, 63P5,12); Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, PMAP2008-4, scale 1:20 000.

References:
Macek, J.J., Zwanig, H.V. and Pacey, J.M., 2006: Thompson Nickel Belt geological compilation map, Manitoba (parts of NTS 63G, J, O, P and 64A and B); Manitoba Science, Technology, Energy and Mines, Manitoba Geological Survey, Open File Report OF2006-33, 1 CD-ROM.

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