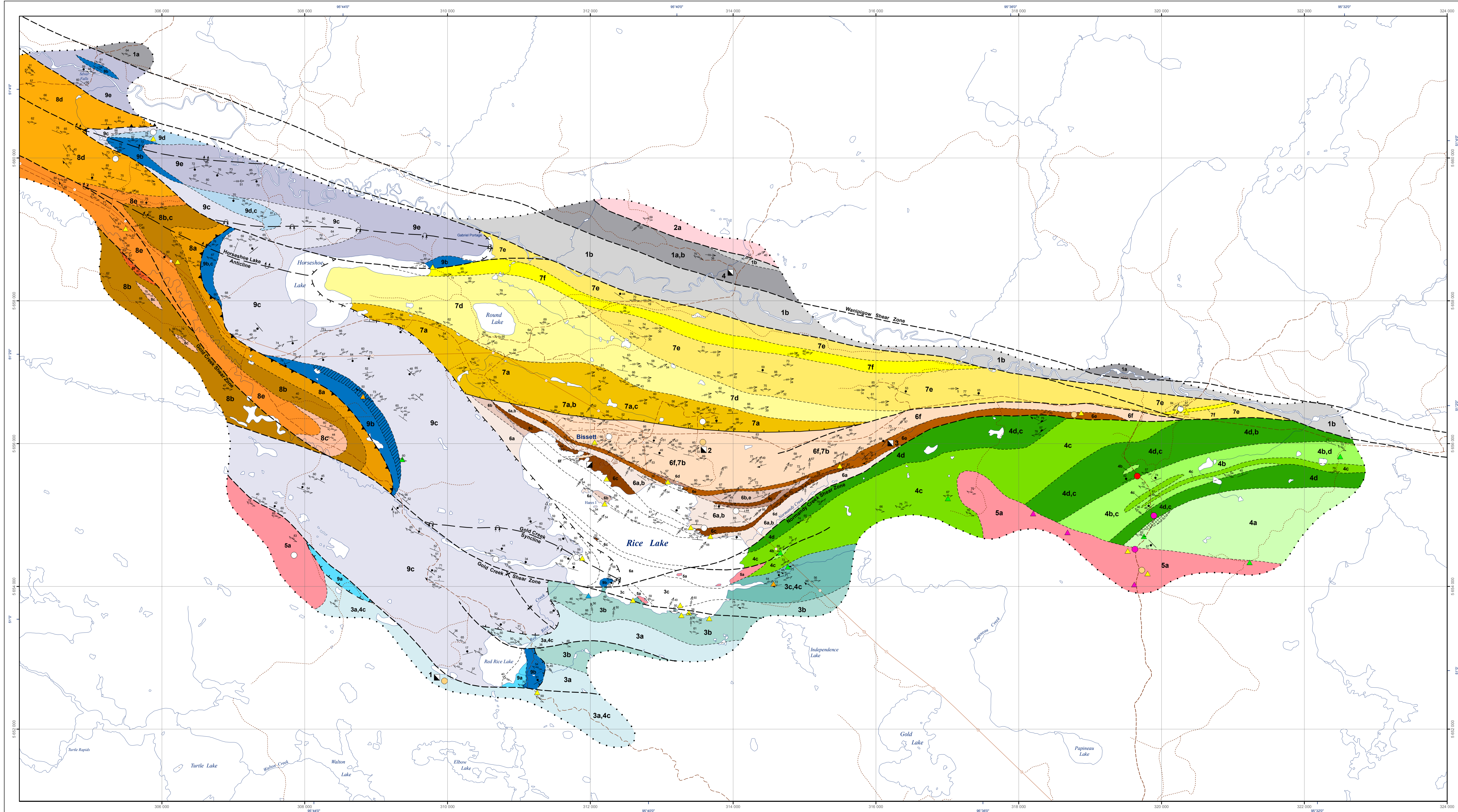




Geology and structure of the Rice Lake area, Rice Lake greenstone belt, Manitoba (part of NTS 52M04 and 52L13)



Legend

San Antonio assemblage

- San Antonio Formation
- 9e Thin-bedded greywacke-mudstone turbidite
- 9d Orthoquartzite
- 9c Cross-bedded quartz greywacke, protoquartzite, subarkose; minor pebble conglomerate
- 9b Polymictic pebble to cobble conglomerate and pebbly greywacke
- 9a Monolithic tonalite boulder conglomerate; minor pebble conglomerate and sandstone

Bidou assemblage

- Gold Creek section
- 6f Quartz-feldspar porphyry
- 6e Thick-bedded feldspathic greywacke, siltstone, mudstone, chert
- 6d Heterolithic (mainly intermediate to felsic) volcanoclastic rocks; minor thin-bedded tuffaceous sandstone, siltstone, chert
- 6c Pillowed basalt to andesite flows, flow breccia; minor lapilli tuff (transitional calcalkalic-tholeiitic; mature arc affinity)
- 6b Gabbro (transitional calcalkalic-tholeiitic; mature arc affinity)
- 6a Porphyritic andesite breccia, tuff breccia, lapilli tuff

Round Lake section

- 7f Rhyolitic quartz-feldspar porphyry (hypabyssal)
- 7e Bedded dacitic tuff breccia, lapilli tuff, conglomerate, sandstone
- 7d Andesitic to dacitic crystal tuff, tuff breccia
- 7c Basaltic tuff, lapilli tuff (calcalkalic; sanukitoid; evolved arc affinity)
- 7b Gabbro (calcalkalic; sanukitoid; evolved arc affinity)
- 7a Heterolithic volcanic conglomerate; minor sandstone

Townsite section (6a-e intruded by 6f dacite dikes)

- 6f Andesitic to dacitic tuff breccia, crystal tuff, breccia; minor heterolithic breccia and conglomerate, thin-bedded sandstone, mafic dikes (7b)
- 6e Pillowed and massive basalt to basaltic andesite flows; minor flow breccia, gabbro (transitional calcalkalic-tholeiitic; mature arc affinity)
- 6d Mafic volcanic wacke and conglomerate; minor chert
- 6c Gabbro (transitional calcalkalic-tholeiitic; mature arc affinity)
- 6b Heterolithic pebble to cobble conglomerate; minor felsic volcanic sandstone, gabbro
- 6a Felsic volcanic sandstone, minor pebble conglomerate, chert, gabbro

Rosa River plutonic suite

- 5b Biotite granodiorite
- 5a Plagioclase porphyritic, hornblende-biotite granodiorite and quartz diorite

Rainy Lake Road section (intruded by abundant 5a dikes)

- 4d Pillowed and massive basalt flows, gabbro; minor flow breccia (Fe-tholeiitic; MORB affinity)
- 4c Gabbro (Fe-tholeiitic; MORB affinity)
- 4b Greywacke-mudstone turbidite; minor pillowed basalt flows and flow breccia, gabbro, felsic tuff, and heterolithic lapilli tuff
- 4a Dacitic tuff breccia, breccia, lapilli tuff; minor volcanic sandstone, mafic dikes (4c and 7b)

Independence Lake section (intruded by abundant 5a and 4c dikes)

- 3c Mafic to intermediate breccia, tuff breccia, lapilli tuff; pillowed flows, flow breccia
- 3b Porphyritic andesite (massive to brecciated)
- 3a Heterolithic (mainly intermediate to felsic) volcanic conglomerate, breccia, tuff breccia

North Caribou Terrane

- Wanipigow River plutonic suite
- 2b Granodiorite
- 2a Tonalite
- Little Beaver assemblage
- 1b Chloritic mylonite and tectonite; uncertain precursor
- 1a Psammitic and semipelitic schist, with abundant 2a dikes; minor iron formation, pebble conglomerate, gabbro

Geology by: S.D. Anderson (2004-2005)

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Manitoba Geological Survey, 2005
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:
Anderson, S.D., 2005. Geology and structure of the Rice Lake area, Rice Lake greenstone belt, Manitoba (part of NTS 52M04 and 52L13), Manitoba Industry, Trade and Mines, Manitoba Geological Survey, Preliminary Map PMAP2005-XX, scale 1:20 000.

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Symbols

- Geological contacts**
 - approximate
 - - - fault
 - ▲- thrust fault
- Fold axial trace**
 - ⊥ overturned syncline
 - ⊥ syncline
 - ⊥ overturned anticline
- Planar structures**
 - | bedding; upright
 - ⊥ bedding; overturned
 - ⊥ bedding; tops unknown
 - | pillows; top known
 - ⊥ foliation; generation 3
 - ⊥ foliation; generation 4
 - ⊥ foliation; generation 5
 - ⊥ shear bands; dextral
- Lineations**
 - ⊥ intersection lineation; generation 3
 - ⊥ L-fabric; generation 3
- Alteration sites**
 - ▲ ankerite-sericite
 - ▲ chlorite-epidote
 - ▲ chlorite-sericite, ankerite
 - ▲ epidote
 - ▲ sericitizerkerite, pyrite
- Mineral occurrences**
 - pyrrhotite-chalcopyrite
 - pyrite
 - quartz vein
 - auriferous quartz vein
 - ▨ chlorite alteration
 - ▨ sericite+py, ankerite alteration

