



- Legend**
- Paleoproterozoic mafic dikes**
- 7c Diabase: typically <10 m wide, locally with chilled margins
 - 7b Gabbro: typically >10 m wide, local igneous layering, local pegmatitic segregations
 - 7a Ultramafic: typically hornblende peridotite, >10 m wide, local igneous layering, local pegmatitic segregations
- Archean post-D intrusions**
- 6c Granitic pegmatite/aplite dikes: typically <3 m
 - 6b Biotite granite: medium to coarse grained, foliated
 - 6a Biotite granodiorite: locally amphibole-bearing, locally K-feldspar porphyritic, foliated

- Archean pre- to syn-D rocks**
- 5 Gneissic rocks of unusual bulk composition
 - 5b Al-Ca gneiss suite: plagioclase and garnet rich with subordinate deep green clinopyroxene, variable quartz and local scapolite; typically forms 0.4–1.0 m thick, discontinuous layers hosted in unit 1b
 - 5a Al-Mg gneiss suite: cordierite rich with variable orthopyroxene, sapphirine and quartz; typically forms layers <2.5 m thick associated with units 2 and 4a
 - 4 Siliciclastic rocks
 - 4c Mudstone: quartzofeldspathic diatexite with variable amounts of garnet, orthopyroxene and biotite; cordierite-sapphirine; commonly interlayered with unit 4a, b
 - 4b Arkosic wacke: quartzofeldspathic metatexite to diatexite with variable amounts of garnet, orthopyroxene, clinopyroxene, biotite and sillimanite; commonly interlayered with unit 4c, rarely interlayered with unit 2
 - 4a Arkosic arenite: quartzofeldspathic metatexite to diatexite with <15% garnet, biotite, orthopyroxene and magnetite; commonly interlayered with unit 4b, c, locally associated with unit 5a

- 3 Intermediate gneiss suite (shoshonite affinity)
 - 3b Leucocratic intermediate gneiss: monzodioritic composition with <20% clinopyroxene, orthopyroxene and hornblende
 - 3a Mesocratic intermediate gneiss: monzodioritic composition, enriched in biotite with subordinate clinopyroxene
- 2 Mafic gneiss suite
 - 2d Banded iron formation: quartz, orthopyroxene and magnetite rich; typically forms layers <1.5 m thick associated with unit 2a, b
 - 2c Ultramafic gneiss: clinopyroxene and orthopyroxene rich with subordinate hornblende; typically occurs as boudins <3 m thick in unit 2a, b, and rarely in unit 1b
 - 2b Leucocratic mafic gneiss: plagioclase rich with <30% clinopyroxene and orthopyroxene, minor magnetite, local hornblende, garnet and biotite; typically interlayered with unit 2a; derived, at least in part, from volcanic rocks
 - 2a Mesocratic mafic gneiss: plagioclase rich with >40% clinopyroxene and orthopyroxene, subordinate hornblende and magnetite; typically interlayered with unit 2b; derived, at least in part, from volcanic rocks

- 1 Gneissic intrusions
 - 1b Gneissic trondhjemite: <10% orthopyroxene and clinopyroxene with subordinate magnetite
 - 1a Gneissic tonalite: >10% orthopyroxene and clinopyroxene with subordinate magnetite
- Hematized fracture zone
- Zone of pseudotachylite veining

- Symbols**
- | | | | |
|-------------------------|--------------------------------------|---|-------------------------------------|
| Layering | Igneous layering, facing unknown | Shear | Dextral, sinistral |
| Foliation | Unknown generation, generation 1, 2 | Lineations | Lineation, generation unknown |
| Gneissosity | Unknown generation, generation 1 | | Mineral lineation |
| Cleavage | Spaced cleavage | | Rodding |
| | | | Slickenstriae |
| Fractures | Fracture, hematized | Minor fold axis (generation unknown) | S-symmetric, symmetric, Z-symmetric |
| | Pseudotachylite | Axial plane of minor fold | Unknown generation, generation 2 |
| Fault | Sense unknown, dextral, sinistral | Other | Dike |
| Geologic contact | Approximate | | |
| | Assumed (underwater, buried contact) | | |

Map GR2021-1-1

Bedrock geology of central Sipiwes Lake, Pikwitonei granulite domain, central Manitoba (part of NTS 63P4)

Geology by C.G. Couëslan, C.O. Böhm and T. Martins

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Suggested references:

Couëslan, C.G., Böhm, C.O. and Martins, T. 2021: Bedrock geology of central Sipiwes Lake, Pikwitonei granulite domain, central Manitoba (part of NTS 63P4); Manitoba Agriculture and Resource Development, Manitoba Geological Survey, Geoscientific Report GR2021-1, Map GR2021-1-1, scale 1:20 000.

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