



LEGEND

SYMBOLS

**PRECAMBRIAN (APHEBIAN)
INTRUSIVE ROCKS**

Post-Sickle and similar rocks of unknown age

22	22a quartz porphyry, quartz-feldspar porphyry; 22b diabase
21	21a aplite, aplitic granite; 21b pegmatite, graphic granite
20	Granite, granodiorite
19	19a hornblende-biotite granodiorite; 19b tonalite
18	18a gabbro, minor ultramafic rock; 18b diabase; 18c diorite ; 18d plutonic breccia
Pre-Sickle and similar rocks of unknown age	
17	17a granite, granodiorite; 17b pegmatite, aplite; 17c syenite; 17d aplitic granite
16	16a diorite, quartz diorite; 16b hornblende-biotite tonalite, quartz diorite; 16c granodiorite, tonalite
15	Gabbro, norite, diorite, ultramafic rock
14	Hornblende diorite, quartz diorite
13	Gabbro, diabase

SICKLE GROUP (11a, 12a) and SICKLE METAMORPHIC SUITE (11, 12b-12g)

12 Sandstone, derived schist and gneiss: 12a arkosic sandstone, pebbly sandstone; 12b muscovite-bearing arkose, pebbly arkose; 12c greywacke, 12d hornblende-bearing psammitic gneiss, calcareous sandstone; 12e biotite-bearing psammite gneiss; 12f quartz-feldspar-muscovite schist, arkosic sandstone; 12g sillimanite-bearing arkosic gneiss

SICKLE OR WASEKWAN GROUP

10 Conglomerate with sedimentary, volcanic and granitoid clasts, greywacke; 10a conglomerate, hornblende greywacke matrix; 10b conglomerate, biotite greywacke matrix; 10c staurolite schist, greywacke; 10d biotite greywacke, siltstone, minor argillite

WASEKWAN GROUP

9	Sedimentary rocks: coarse- to fine-grained, paragneiss; 9a pebbly gneiss; paragonolite; 9b hornblende gneiss; alstonite; 9c biotite gneiss; sillimanite; 9d quartzite; 9e gneiss; 9f sillimanite and mafic mudstone; 9g mafic mudstone, tuff; greywacke; 9g argillite; 9h chert; 9i porphyroblastic schist; 9j iron formation
8	Conglomerate: 8a quartz-pebble conglomerate; 8b conglomerate with volcanics and sedimentary clasts; 8c pebbly mudstone; 8d polydeformed volcanic breccia; conglomerate
7	Rhyolite, felsic gneiss; 7a massive aphyric rhyolite; 7b massive porphyritic rhyolite; 7c porphyritic rhyolite; 7d hyaloclastite; 7e tuff
6	Dacite: 6a massive aphyric dacite; 6b massive porphyritic dacite; 6c breccia; 6d tuff; 6e altered dacite, schist
5a, 6a, 6b	Intermediate and felsic volcanic rocks: 5a andesite; 5b porphyritic dacite; 5c intermediate tuff; 6a tuff; 6b pyroclastic breccia
4	Mafic and intermediate volcanic rocks, amphibolite: 4a massive porphyritic and amphibolite; 4b andesite; 4c pillow basalt and andesite; 4d quartzite; 4e amphibolite; 4f dacite; 4g amphibolite; 4h mafic tuff; 4i intermediate tuff; 4j garnetite; 4k amphibolite; 4l andesite
3	Porphyritic basalt; 3a massive basalt; 3b pillowed basalt; 3c autoclastic breccia; 3d intermediate mafic and aphyric basalt; 3e tuff; 3f banded amphibolite; breccia; 3g mafic porphyry
2	Aphyric basalt; 2a massive basalt; 2b pillowed basalt; 2c pillow breccia; 2d hyaloclastite; 2d tuff; 2e plagioclase-aphyric basalt; 2f high-magnesian basalt, tuff, fhyaloclastite; 2g mafic, amphibolite
1	Greywacke, sillimanite, mudstone, minor volcanic rocks
W	Wasekan Group undivided

ROCKS OF PROBABLE WASEKWAN AGE:
Burntwood River Metamorphic Suite, Zed Lake Greywacke

IA-E 1A biotite ± garnet-bearing metagreywacke, migmatite; 1B biotite- sillimanite- garnet-bearing metagreywacke-metamudstone, migmatite; 1C layered and massive amphibolite; 1D quartzite; 1E marble

Units 1 and 2 are subdivided after the mapping of J. D. Allan, G. P. Crombie, A. P. Fawley, G. C. Milligan, T. A. Oliver and M. S. Stanton. Additional data are after R. H. Pinsky.

Units 1 to 9 (Wasekwan Group) are not in stratigraphic order; unit 10 overlies or is equivalent to unit 9, but the Wasekwan Group, units 1A, 1B and 1C are in stratigraphic order but units 1D to 1F are not. Unit 1E overlies unit 1D.

Units 11a and 12a (Sickle Group) unconformably overlie the Wasekwan Group and early plutons (units 13 to 17); units 11 and 12b to 12g (Sickle Metamorphic Suite) conformably disconformably overlie units 1A to 1E (Burntwood River Metamorphic Suite and 2nd Lake greywacke).

The terminology used in this map is that of primary rock types whereas the metamorphic grade ranges from low to medium. However, certain metamorphic mineral names are used in the legend for text to indicate distinctions in composition. Metamorphic terms are used for the highest grade rocks.

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MINERALS AND ELEMENTS

PY	Pyrite	AU	Gold
PH	Pyrrhotite	MG	Magnetite
CP	Chalcopyrite	BN	Bornite
SH	Sphalerite	GL	Galena

The magnetic declination at the centre of the map is approximately 12°16' East (1981) and is decreasing by 16.9' annually.

