

LEGEND

PRECAMBRIAN (PROTEROZOIC)

INTRUSIVE ROCKS

- 17 Felsic pegmatite
- 16 Quartz-feldspar porphyry
- 15 Syeno-granite
- 14 Muscovite syeno-granite; magnetite and sillimanite-bearing; 14a hornblende alkali feldspar syenite
- 13 Leucogranite and leucogranodiorite; contains abundant inclusions of paragneiss; 13a contains inclusions of Sickle Metamorphic Suite rocks only
- 12 Magnetiferous granite and granodiorite
- 11 White biotite granodiorite and tonalite
- 10 Porphyroblastic granite and granodiorite; 10a porphyroblastic hornblende granite; 10b porphyroblastic biotite-clinopyroxene granodiorite
- 9 Clinopyroxene tonalite

SICKLE METAMORPHIC SUITE

- 8 Meta-arkose; sillimanite-bearing; 8a amphibolite pods within the meta-arkose
- 7 Feldspathic metagreywacke; massively bedded magnetiferous biotite gneiss; 7a delicately layered feldspathic greywacke gneiss
- 6 Pelitic gneiss; magnetiferous garnet-cordierite-sillimanite gneiss
- 5 Hornblende-plagioclase psammitic gneiss; 5a garnet-sillimanite gneiss
- 4 Polymictic metaconglomerate

BURNTWOOD RIVER METAMORPHIC SUITE

- 3 Amphibolite; 3a hornblende-diopside para-amphibolite (with thin calc-silicate and meta-iron formation layers); 3b massively layered amphibolite, metavolcanic rocks; 3c ultramafic rocks
- 2 Amphibolite; 2a hornblende-plagioclase amphibolite; 2b amphibolite interlayered with metagreywacke; 2c metagabbro
- 1 Metagreywacke; 1a greywacke paragneiss; 1b metatectic greywacke gneiss; 1c diatectic greywacke gneiss; 1d amphibolite

STRATIGRAPHIC NOTE

Rocks of the Sickle Suite, units 4 to 8, are in stratigraphic order, although the pelitic gneiss (6) has a variable stratigraphic position. The Burntwood River Suite underlies the Sickle Suite; however, the amphibolite (2) lies within the metagreywackes (1) so units 1 and 2 do not represent a stratigraphic sequence.

The age relationships of the intrusive rocks is not certain, thus units 9 to 17 represent only an approximation of chronological order.

Units not occurring on this map are indicated in light type and patterns are omitted. (See map GR 79-1-2)

SYMBOLS

- Geological contact (defined, approximate, assumed, gradational)
- Foliation; schistosity, gneissosity (inclined, vertical, dip unknown)
- Foliation and parallel primary layering; top unknown (inclined, vertical, dip unknown)
- Foliation and parallel metamorphic layering (inclined, vertical, dip unknown)
- Cataclastic foliation (inclined)
- Fault (defined, approximate, assumed)
- Linear structures
- Mineral lineation (plunge indicated)
- Microcrenulation (plunge indicated)
- Boudin axis (plunge indicated)
- Rodding (plunge indicated)
- Minor folds
- Axis (plunge indicated)
- Axial surface (inclined)
- Symmetry (Z-asymmetrical, S-asymmetrical, symmetrical)
- Area of rock exposure
- Swamp
- Rapids
- Reef
- Esker (direction of flow unknown)
- Area of limited outcrop.
- Airport
- Power transmission line with access road

Geology by  
P. G. LENTON

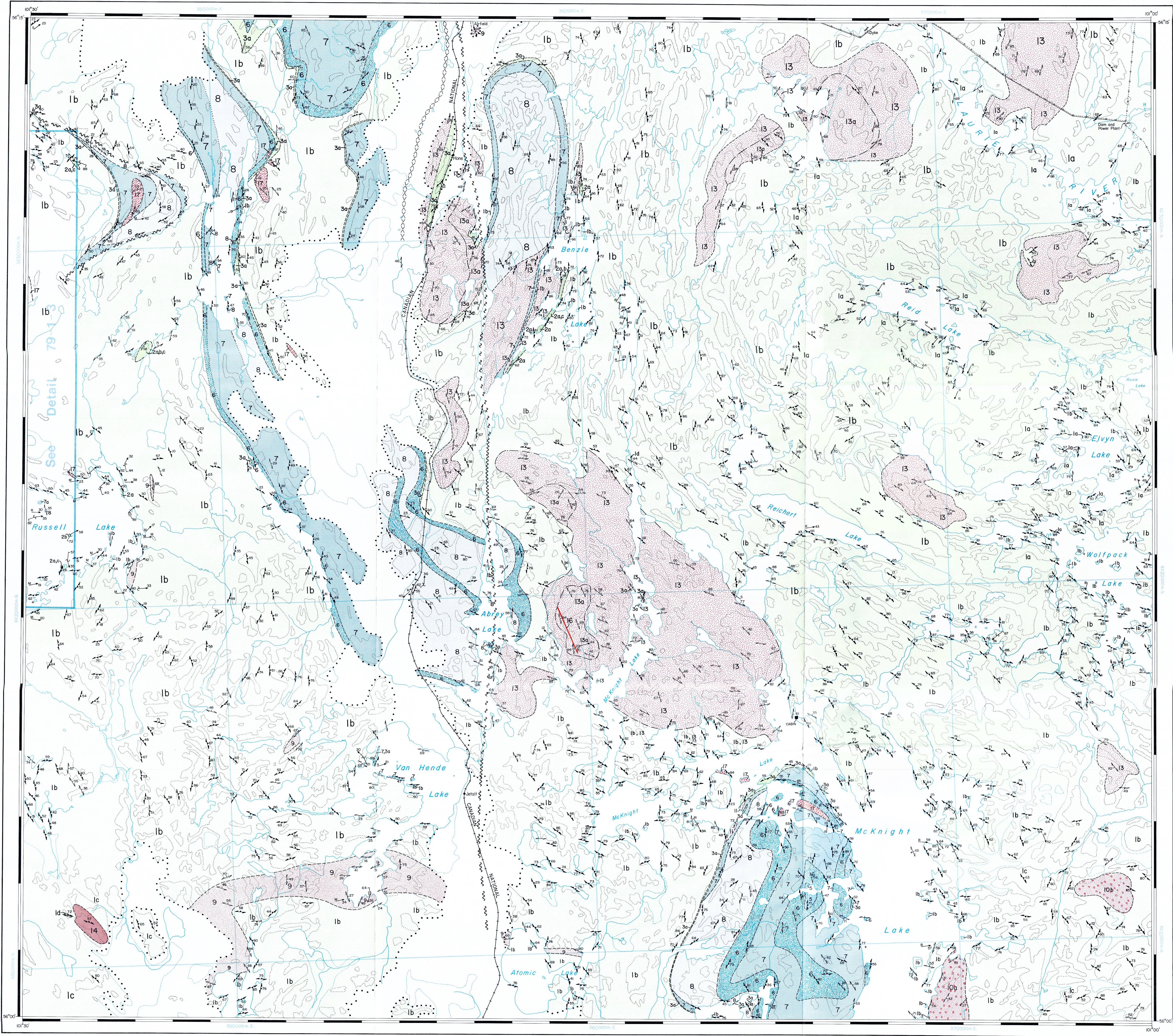
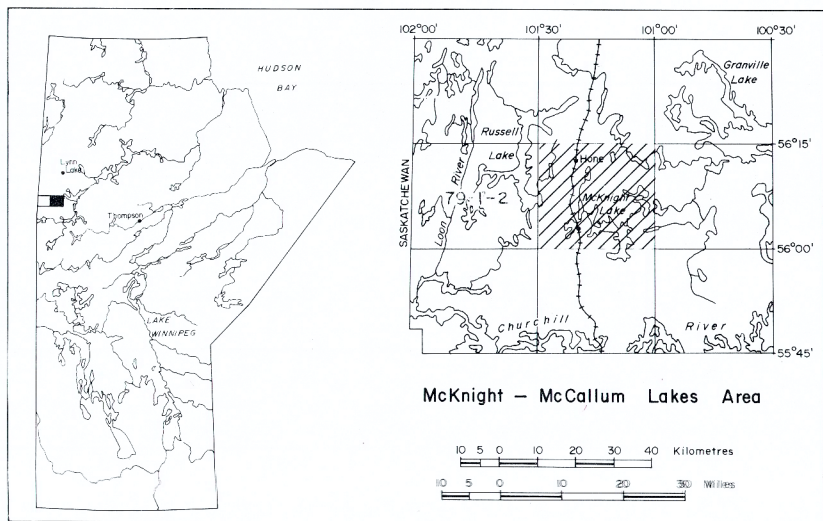
Cartography by  
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To Accompany Geological Report GR 79-1

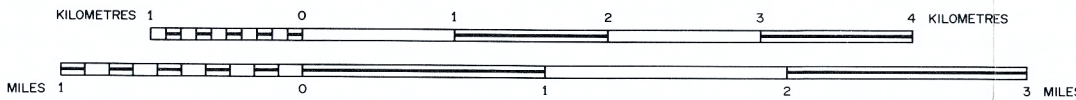
Aerial photographs numbered:  
A21137: 7-25, 85-105  
A21107: 1-21, 38-56, 116-136, 152-173, 230-250  
A21135: 29-49, 65-85, 141-161, 178-198  
A21139: 29-49, 64-73, 138-158  
provide complete coverage of this area and may be obtained from the National Air Photo Library, Ottawa.

The approximate magnetic declination at the centre of the area is 14°24'E (1979) and is decreasing 5.8' annually.

INDEX MAP



Scale 1:50 000



McKNIGHT LAKE

MAP GR 79-1-1