PRELIMINARY SERIES

GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

MAP 22 - 1970
PAPER 70-28

2107,8

GEOLOGY

PORTAGE LAKES AREA

NEW BRUNSWICK

Scale 1:25,000

Miles 1 0 1 Miles

Kilometres 1 0 1 Kilometres

Cross-sections appear separately as Figure 5 accompanying Paper 70-28

LEGEND

PALEOZOIC

DEVONIAN (?) AND (?) YOUNGER

11 Diabase dykes

MIDDLE DEVONIAN

10 Batholithic intrusions, undivided; 10a, granite; 10b, troctolite; 10c, gabbro

EARLY DEVONIAN

9 Light brown to grey-green sandstone, siltstone, with: 9a, interlayered basalt, in part amygdaloidal; 9b, spherulitic rhyolite and tuff; 9c, quartz-pebble conglomerate

SILURIAN

LATE SILURIAN

8 8a, lithic greywacke, grit, argillite, sandstone, with grey-green to maroon conglomerate (cgl.); 8b, grey-green, banded, slaty siltstone, in part with bituminous limestone nodules

ORDOVICIAN (?)

PRE-LATE SILURIAN

7 Pink to brown metagranite

6 Grey to grey-green metagabbro

ORDOVICIAN

EARLY TO MIDDLE ORDOVICIAN AND (?) OLDER

TETAGOUCHE GROUP

5 Massive, grey-green to green, basic to intermediate greenstone

4 Slate, chert, andesitic metavolcanics; 4a, red to maroon and green manganiferous slate and chert; S, dark grey to black slate, in part phyllitic, thinly bedded grey chert; L, grey limestone conglomerate, bituminous crystalline limestone; V, dark green to purple andesite, in part vesicular; C, chloritic schist, probably metamorphosed intermediate to basic tuff

3 3a, grey to brown felsite; 3b, quartz-feldspar augen-schist, includes metamorphosed tuffaceous sediments; 3c, quartz-chlorite and quartz-muscovite schists; A, intercalations of actinolite schist

2 Grey slate, grey-green metasiltstone, metagreywacke

1 Grey, laminated, fine- to medium-grained quartzite, grey phyllite

Rock outcrop (questionable), area of outcrop

Area of rock fragments indicative of bedrock type nearby

Geological boundary (approximate, assumed)

Limit of present study area

S_0 Bedding, tops known (inclined)

S_0 Bedding, tops unknown (inclined, vertical)

S_0 Igneous banding

S_1 Cleavage, foliation (horizontal, inclined, vertical, dip unknown, crenulated, folded)

Overall trend lines of S_1 in areas where it is folded

S_2 Crenulation cleavage, fracture cleavage (horizontal, inclined, vertical)

S_2 Crenulation cleavage (dip unknown with sense of crenulation)

S_3 Crenulation cleavage, fracture cleavage (inclined, vertical)

L_1 Mineral lineation, intersection S_0/S_1

L_2 Crenulation axes, intersection S_1/S_2

L_3 Crenulation axes on S_2, intersecting L_2

Folds, mesoscopic (F_1, F_2, F_3); additional symbols indicate the generation of the fold with plunge or axial plane or both

Kink band (conjugate, asymmetric)

F_1 Anticlinorium (approximate location of axis, overturned)

F_1 Synclinorium (approximate location of axis, overturned)

F_3 Anticline and monocline (approximate location of axis)

$F_{Sil.\ Dev.}$ Syncline (approximate location of axis)

Fault (defined, approximate, assumed)

Joint (inclined, vertical)

Glacial striae (direction of ice-movement unknown)

Fossil locality

Sulphide deposits

Mineral occurrence, pyrite .... py, gossan .... G .... ✕ py

Geology by H. Helmstaedt, 1969

To accompany Paper 70-28 by H. Helmstaedt

Geological cartography by the Geological Survey of Canada

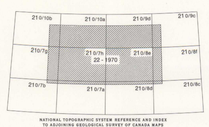
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base-map from parts of maps published at 1/50,000 scale by the Surveys and Mapping Branch in 1956, 1957, 1958

Copies of the topographical edition of this map may be obtained from the Map Distribution Office, Department of Energy, Mines and Resources, Ottawa

Approximate magnetic declination 1970, 22° 32' West decreasing 2.7' annually

Elevations in feet above mean sea-level



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

INDEX MAP

Published, 1971
Copies of this map may be obtained from the Geological Survey of Canada, Ottawa

MAP 22- 1970
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NEW BRUNSWICK