

PLATE I

GEOLOGIC MAP OF THE COASTAL COMPLEX

TROUT RIVER-CHIMNEY COVE AREA

NEWFOUNDLAND, CANADA

by
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LITHOLOGY

Coastal Complex:

- 1 Gabbroic and ultramafic plutonic rocks (undifferentiated).
 - 1a Homogeneous gabbro.
 - 1b Layered cumulate gabbro.
 - 1c Interlayered cumulate gabbro and ultramafic rocks (>10%).
- 2 Trondhjemite, quartz diorite, and diorite.
 - 2a Metatrondhjemite and metadiorite.
- 3 Strongly foliated and lineated greenschist, amphibolite, and minor ultramafic rocks (undifferentiated).
 - 3a Actinolite and chlorite schist.
 - 3b Amphibolite.
 - 3c Serpentinized ultramafic rock.
- 4 Serpentinite melange. Contains numerous blocks of harzburgite and rare mafic to felsic blocks derived from adjacent units. Restricted to Lark Harbour area (Plate II).
- 5 Gabbro, microgabbro, and diabase. Occurs as intrusive bodies in Units 1-4.
- 6 Mafic and felsic volcanics and minor volcaniclastic sedimentary rocks (undifferentiated). Predominant lava type (where distinguished): m=massive flows, p=pillow lava, b=breccia.
 - 6a Mafic volcanics.
 - 6b Felsic volcanics.

Minor Occurrences:

- Xt Trondhjemite xenoliths.
- Xa Amphibolite xenoliths.
- Xg Gabbro xenoliths.
- T Trondhjemite.
- S Serpentinite.
- G Gabbro.
- D Diabase.
- F Felsite.

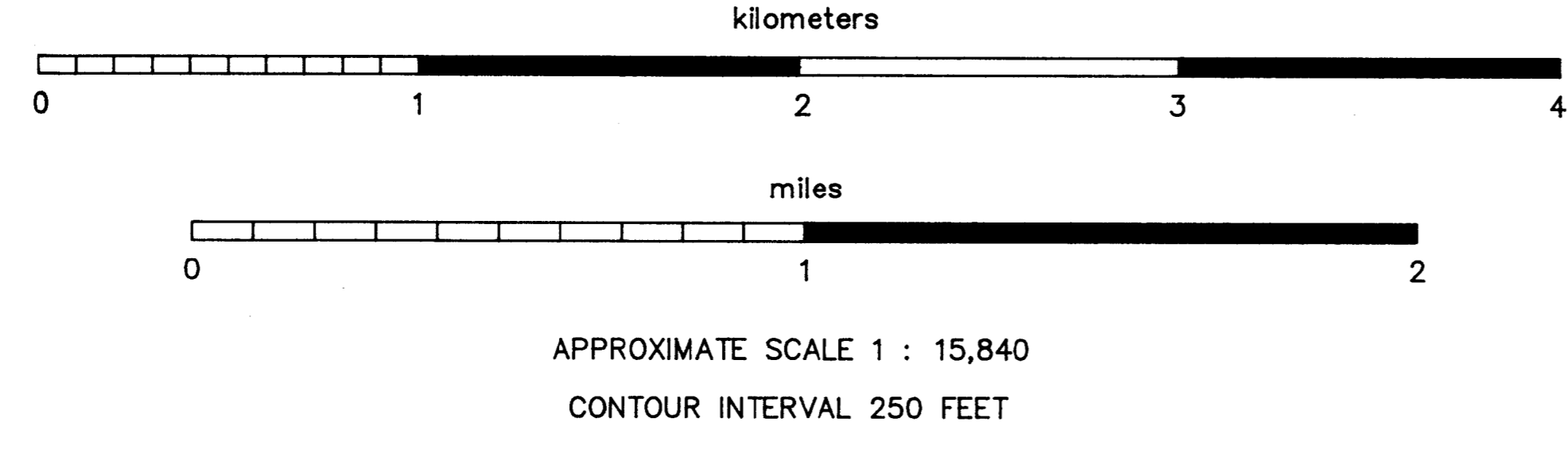
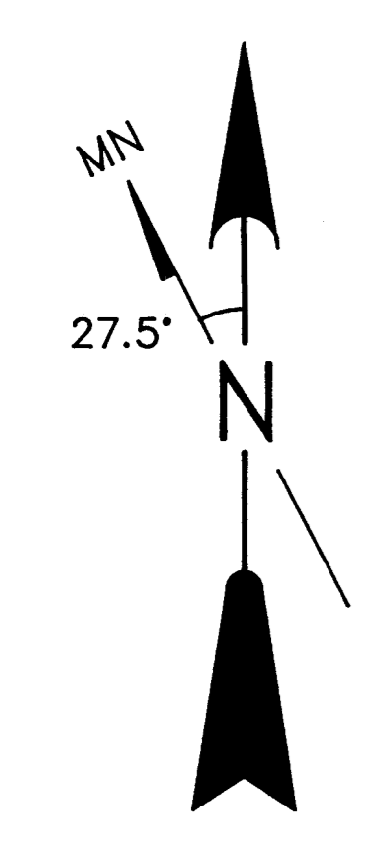
Humber Arm Supergroup:

- bm Blow-Me-Down Brook Formation: sandstone, shale, and minor limestone. May include other units of the Humber Arm Supergroup.
- sm Sedimentary melange.
- sc Skinner Cove Formation and related rocks: mafic to intermediate alkali volcanics, minor limestone and shale.

Area covered by extensive glacial/alluvial deposits.

GULF OF ST. LAWRENCE

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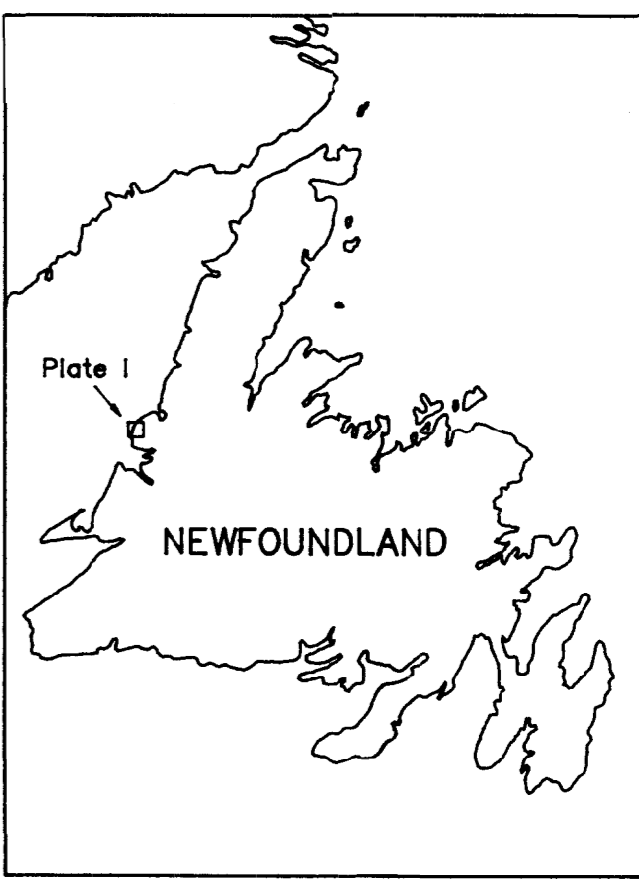
Base map was constructed from planimetrically corrected Forest Type Maps published by the Newfoundland Forest Service. Topography was derived from enlargements of standard 1:50,000 scale topographic maps published by Energy, Mines, and Resources Canada.

Geology by Bruce Idleman and based upon field work conducted during the summers of 1980-1983, except where noted. Smith refers to C.H. Smith, Geol. Surv. of Canada Memoir 290. Rosenkrantz refers to E. Rosenkrantz, 1980, Ph.D. diss., State Univ. of New York at Albany. Karson refers to J. Karson, 1984, Geol. Soc. London Spec. Pub. 13, p. 131-144.

Geology after Karson (1984) and aerial photo interpretation. Contact locations are approximate.

TM basal thrust after Smith (1958).

NAM basal thrust after Rosenkrantz (1980).



MAP AND STRUCTURE SYMBOLS

- Primary lithologic contact.
- Secondary lithologic contact (sharp, gradational).
- Trace of fault, with dip where known.
- Trace of basal thrust, with dip where known. Teeth on overthrust plate.
- Zone of phacoclastically cleaved serpentinite.
- Axial trace of major upright fold, with plunge direction (antiform, synform).
- Pond and stream.
- Topographic contour.
- Outcrop.
- Road (maintained, unimproved).
- Limit of mapping.
- Locality discussed in text.
- Line of section on Plate III.
- Igneous layering in plutonic rocks (inclined, vertical, parallel with foliation).
- Penetrative foliation in plutonic and metamorphic rocks (inclined, vertical).
- Slaty or phacoidal cleavage in sedimentary rocks (inclined, vertical).
- Outcrop-scale ductile shear zone (inclined, vertical).
- Mineral elongation lineation in plutonic and metamorphic rocks (horizontal, inclined).
- Minor fold axis of unknown generation in plutonic and metamorphic rocks (horizontal, inclined).
- Minor fold axis of known generation in plutonic and metamorphic rocks (F₂, F₃, F₄).
- Minor fold axis in sedimentary rocks (inclined, vertical).
- Diabase or microgabbro dike (inclined, vertical).
- Felsite or felsite porphyry dike (inclined, vertical).
- Flow surface in volcanic rocks (horizontal, inclined, vertical).
- Bedding in sedimentary rocks, tops known (horizontal, inclined, vertical, overturned).
- Bedding in sedimentary rocks, tops unknown (horizontal, inclined, vertical).

20'

5'