

LEGEND

TRIASSIC

- Tv WOLFVILLE FORMATION: sandstone and arkose (after Taylor, 1969)

DEVONO-CARBONIFEROUS

SOUTH MOUNTAIN BATHOLITH

- DCmgED **EAST DALHOUSIE LEUCOMONZOGRANITE**¹: Textural variations include fine- to medium-grained moderately equigranular, porphyritic and slightly megacrystic. Modal concentrations of biotite (1-2.7%), muscovite (1-4%) and cordierite (tr-2%) are highly variable.
- DCmgMH **MICKEY HILL LEUCOMONZOGRANITE**: contains biotite (4-7%), muscovite (tr-4%), garnet and cordierite (tr-2%) and has a porphyritic texture. Biotite has a bimodal grain size and is commonly chloritized.
- DCmgLG **LAKE GEORGE LEUCOMONZOGRANITE**: white to buff predominantly medium- to coarse-grained, locally fine- to coarse-grained, megacrystic (5-30%, generally 15-25%), biotite (5-8%, generally 5%); muscovite (tr-3%), cordierite (tr-1%), xenoliths are rare.
- DCmgL **LEUCOMONZOGRANITE**: fine- to medium-grained moderately equigranular to porphyritic, contains biotite (4-7%), muscovite (2-4%), and rare cordierite (trace).
- DCmgWD **WEST DALHOUSIE MONZOGRANITE**: fine- to medium-grained moderately equigranular containing biotite (6-14%), muscovite (tr-3%) and cordierite (tr-4%). The cordierite is invariably pinitized and may be locally abundant (< 4% large 1 cm² blocky cordierite crystals). area of megacrystic texture, reflected by the presence of abundant (25-40%) equidimensional (1x3 cm) alkali-feldspar megacrysts.
- DCmgLR **LITTLE ROUND LAKE MONZOGRANITE**: mostly medium- to coarse-grained, K-feldspar megacrystic (5-15%) to porphyritic. Unit contains biotite (11-16%, invariably pinitized), cordierite (tr-1%), Small (< 10 cm²) xenoliths are common.
- DCmgSG **SCRAG LAKE MONZOGRANITE**: medium- to coarse-grained, moderately equigranular to K-feldspar megacrystic (5-15%). Contains biotite (14-18%) and trace amounts of muscovite and pinitized cordierite. Small (< 10 cm²) xenoliths are common.
- DCmgSS **SCRAG LAKE GRANODIORITE**²: medium- to coarse-grained, variate to medium-grained, moderately equigranular texture and a high biotite content (16-24%). Small rounded xenoliths are also common.
- DCmgLT **LEUILLE GRANODIORITE**: characterized by a fine- to coarse-grained, variate to medium-grained, moderately equigranular texture and a high biotite content (16-24%). Small rounded xenoliths are also common.
- DCmgM **MAFIC PORPHYRY**: medium-grained moderately equigranular in texture and contains abundant biotite (> 20%). Dark grey in colour and small (< 5 cm) xenoliths are abundant.

DEVONIAN

- Dt **TORBROOK FORMATION**: shale, siltstone, quartzite; commonly reddish brown - dark grey (after Taylor, 1969)

CAMBRO-ORDOVICIAN

MEGUMA GROUP

- COv **HALIFAX FORMATION**: finely laminated slate and siltstone, minor quartz greywacke (after Taylor 1969; and Rogers 1986).

SYMBOLS
(not all symbols occur on map)

- Rock outcrop, probable outcrop, float
- Geological boundary (defined, approximate, assumed, defined by till clasts)
- Geological boundary - gradational (< 100 m; > 100 m)
- Exposed intrusive contact (arrow pointing toward younger unit, age relation not determined)
- Unconformity (hatching on younger side)
- Limit of mineralogical or textural variation
- Bedding (horizontal, inclined, vertical, overturned, dip unknown, younging direction unknown)
- Anticline (defined, approximate, overturned)
- Syncline (defined, approximate, overturned)
- Preferred orientation of feldspar megacrysts (horizontal, inclined, vertical, dip unknown)
- Schistosity, gneissosity, cleavage, foliation (horizontal, inclined, vertical, dip unknown)
- Breccia
- Schlieren banding (horizontal, inclined, vertical, dip unknown) poorly developed isolated bands and well developed (thin and heavy lines respectively)
- Lineament (from air photos)
- Fault (defined, approximate, assumed, inclined, vertical)
- Fault (sinistral, dextral)
- Shearing and intense fracturing, fracture cleavage (horizontal, inclined, vertical, dip unknown)
- Joint (horizontal, inclined, vertical, dip unknown)
- Striations: sense of ice flow (known or unknown)
- Dyke or vein: ALB-albite; APG-aplite with minor pegmatite; DIAB-diorite; ELA-elan; LUGR-leucogranite; LUMZ-leucomonzo-granite; LUPG-leucoporphyr; MIAP-mica apite; MONZ-monzo-granite; PGAP-pegmatite with minor apite; PEGM-pegmatite; PEGMZ-zoned pegmatite; PORP-porphyr; QTZ-quartz (indicated if mineralized); all unlabelled dykes are apites; < 1 m-thin lines, > 1 m-heavy lines (inclined, vertical, dip unknown)
- Stockwork (type indicated)
- Sheeted complex (type indicated)
- Area of abundant dyking (type or map unit indicated)
- Greisen: < 1 m, > 1 m (indicated if mineralized)
- Megacryst-rich area
- Xenoliths (< 1 m, > 10 m, concentration of xenoliths) map unit indicated when known
- Diamond-drill hole (DDH; reference number from N.S.D.N.R. Drillhole database)
- Trench, adit, shaft
- Mineral occurrence (commodities indicated at top; number on bottom refers to N.S.D.N.R. mineral occurrence cards)
- Mine, Prospect, Quarry (active, abandoned)
- Skarn

COMMON MINERAL ABBREVIATIONS

ad-andalusite; am-amethyst; ap-apite; as-arsenopyrite; at-auriferous; bi-biotite; bo-bornite; ca-calcite; cc-chalocite; ks-cassiterite; cp-chalcopyrite; ch-chlorite; cd-cordierite; cy-cynopside; fl-fluorite; gr-galena; gr-granet; he-hematite; il-ilmenite; ka-kaolinite; ma-malachite; man-manganese minerals; mo-molybdenite; mu-muscovite; po-pyrrhotite; py-pyrite; qtz-quartz; sh-scheelite; sil-sillimanite; sp-sphalerite; se-sericite; to-tourmaline; wo-wolframite.

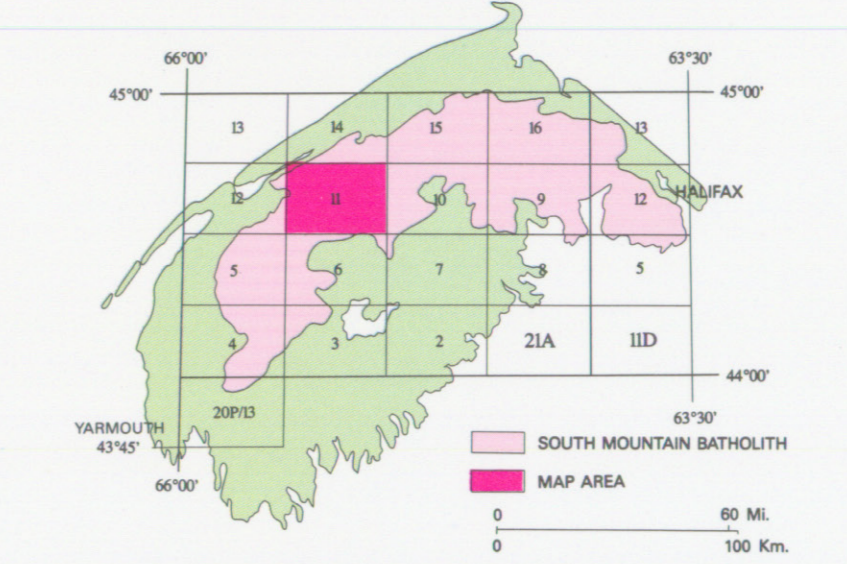
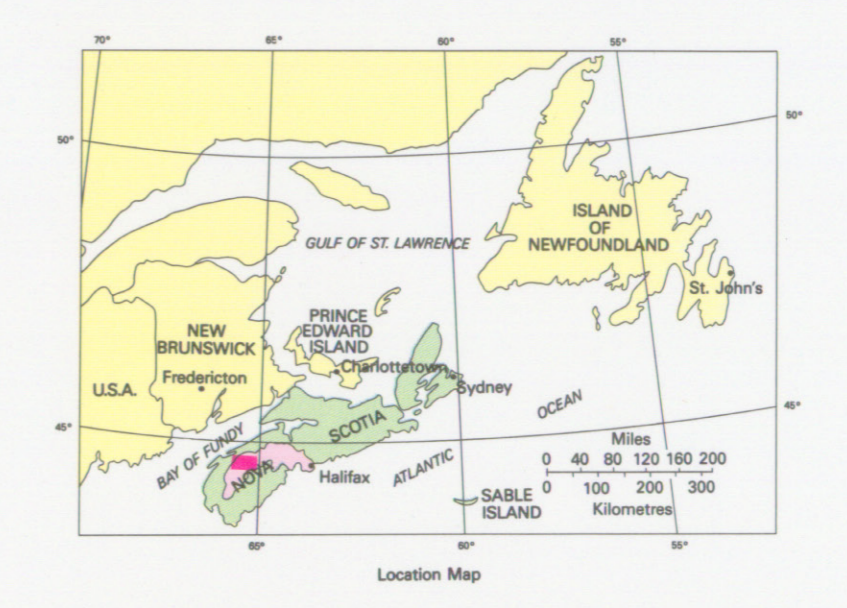
COMMON ALTERATION ABBREVIATIONS

ALB-albitization; CHL-chloritization; DES-desilicification; HAA-high alumina; HEM-hemization; KAO-kaolinitization; LIM-limonitization; POT-potassic (which includes biotitization and K-feldspathization); SAU-sauroitization; SIL-silicification; *intense and pervasive in capitals; slight to moderate in lower case.*

Planimetric base from National Topographic Series, Department of Energy, Mines and Resources, Ottawa.

Updated from aerial photography that was available in May, 1988

Cartography by Land Registration and Information Service, Amherst, Nova Scotia.



NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES
MINES AND ENERGY BRANCHES
MAP 94-06
GEOLOGICAL MAP OF
MILFORD NOVA SCOTIA
(N.T.S. SHEET 21A/11)
SOUTH MOUNTAIN BATHOLITH PROJECT
M. C. COREY and R. J. HORNE
SCALE 1 : 50 000

kilometres 1 0 1 2 3 4 kilometres
miles 1 0 1 2 miles

NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES
HONOURABLE DONALD R. DOWNE DARRELL D. HELTZ
MINISTER DEPUTY MINISTER
HALIFAX, NOVA SCOTIA
1994

Department of Natural Resources
Canada-Nova Scotia Mineral Development Agreement

Canada-Nova Scotia Cooperation Agreement on Mineral Development