

LEGEND

DEVONO-CARBONIFEROUS

SOUTH MOUNTAIN BATHOLITH

- DCimDL** DAVIS LAKE LEUCOMONZOGRANITE: medium- to coarse-grained with abundant K-feldspar megacrysts; contains biotite* (5-9%), muscovite* (trace-1.6%) and cordierite* (trace-1.8%).
- DCmgTL** TOBEATIC LAKE MONZOGRANITE: medium- to coarse-grained, megacrystic texture; contains biotite (14-16.5%), and muscovite (< 2%).
- DCim** ROSEWAY LAKE GRANODIORITE: medium-grained equigranular to slightly porphyritic, contains biotite (16-18%), muscovite (1-1.5%) and very abundant metasedimentary xenoliths†.
- DCim** LEUCOMONZOGRANITE: fine- to medium-grained moderately equigranular to porphyritic, contains biotite (4-7%), muscovite (2-4%), and rare cordierite (trace). Well developed foliation adjacent to shear zone.

CAMBRO-ORDOVICIAN

- EOImBM** BALD MOUNTAIN PLUTON*: medium-grained equigranular with well developed foliation, contains biotite (5%) and muscovite (9%).

MEGUMA GROUP**

- EOG** GOLDENVILLE FORMATION: greenish-grey to light-grey metagreywackes, argillite and minor interbedded slates.
- EOH** HALIFAX FORMATION: finely laminated, black-dark grey slates and siltstones.

*Geology of the Bald Mountain Pluton is after Rogers, 1986; 1988.
 **Geology of Meguma Group rocks is after Taylor, 1969; and Rogers, 1986.

1 LEUCOMONZOGRANITE: A granitoid rock of monzogranite composition with less than 6% combined mafic minerals.
 2 MEGACRYST: A non-genetic term for a crystal that is significantly larger than the surrounding groundmass. In the South Mountain Batholith megacrysts are predominantly subhedral to euhedral K-feldspar, and rarely plagioclase, crystals (generally between 2.5-7 cm in length) in medium- to coarse-grained rocks; adj, megacrystic. Percentage of megacrysts from visual modal estimates.
 3 PERCENT BIOTITE, MUSCOVITE, CORDIERITE: Percentage of muscovite and cordierite from visual modal estimates. Percentage of biotite from point counting and visual modal estimates.
 4 MONZOGRANITE, GRANODIORITE, SYENOGANITE: After Streckeisen (1976): To each plutonic rock its proper name; Earth Science Review, v. 12, p. 1-33.
 5 PORPHYRY: A granitoid rock with predominantly fine-grained groundmass and medium- to coarse-grained phenocrysts (i.e. bimodal grain size). Phenocrysts rarely exceed 2 cm (adj, porphyritic).
 6 XENOLITHS ABUNDANCE: Rare - local xenoliths in some outcrop; Common - a few xenoliths in most outcrop; Abundant - few to many xenoliths in all outcrops.

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.

SYMBOLS

(not all symbols occur on map)

- Rock outcrop, probable outcrop, float
- Geological boundary (defined, approximate, assumed, defined by till clasts, defined by airborne spectrometry)
- 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 (outcrop, float)
- 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: ALBI-albitite; APPG-aplite with minor pegmatite; DIAB-diabase; ELVA-elvan; LUGR-leucogranite; LUMZ-leucomonzogranite; LUPO-leucoporphry; MIAP-mica aplite; MONZ-monzogranite; PEGM-pegmatite; PEGMZ-zoned pegmatite; PGAP-pegmatite with minor aplite; PORP-porphry; QTZ-quartz (indicated if mineralized); all unlabelled dykes are aprites; < 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. Open File Report)
- 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

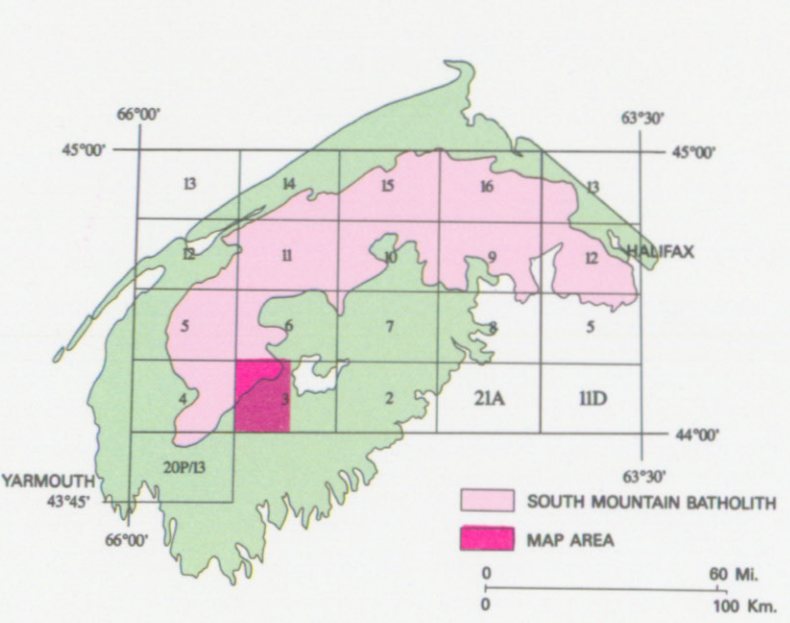
†Note, all diamond drillhole numbers prefixed by map sheet (i.e., 21A/03).

COMMON MINERAL ABBREVIATIONS

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

COMMON ALTERATION ABBREVIATIONS

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



NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES
 MINES AND ENERGY BRANCHES
 MAP 94-02
 GEOLOGICAL MAP OF
**LAKE ROSSIGNOL
 NOVA SCOTIA**
 (N.T.S. SHEET 21A/03 WEST HALF)
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. HILTZ
 MINISTER DEPUTY MINISTER
 HALIFAX, NOVA SCOTIA
 1994

NOVA Scotia Department of Natural Resources
 Canada-Nova Scotia Mineral Development Agreement

Canada-Nova Scotia Cooperation Agreement on Mineral Development