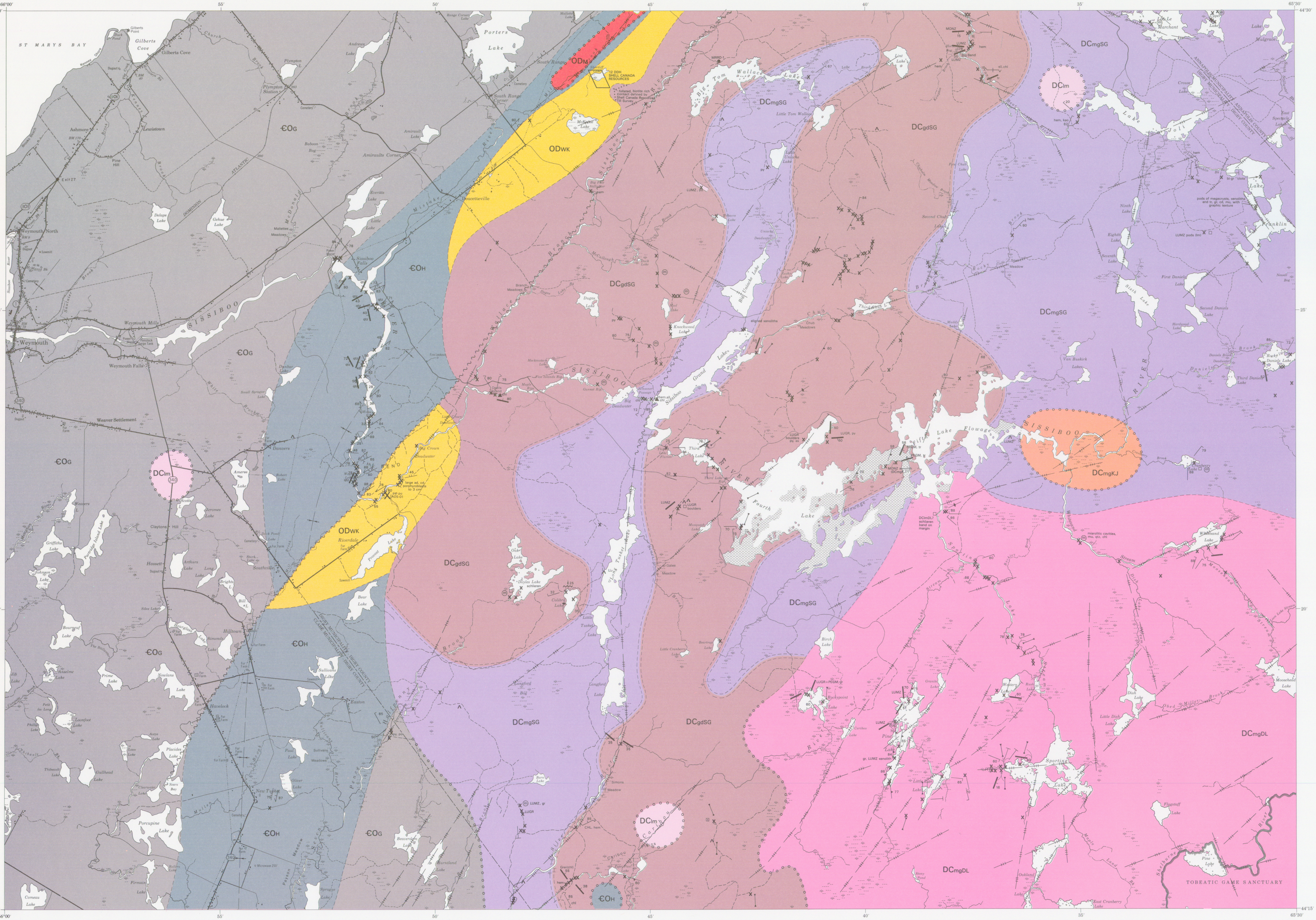


LEGEND

DEVONO-CARBONIFEROUS

SOUTH MOUNTAIN BATHOLITH

DClm — **LEUCOMONZOGRANITE**[1]: light grey to buff, fine- to medium-grained, equigranular or slightly porphyritic[2], 4-6% biotite, 1-4% muscovite[3], devoid of xenoliths[4].

DCmgDL — **DAVIS LAKE MONZOGRANITE**[5]: whitish-grey locally with mottled blue-grey/whitish colour, medium- to coarse-grained, very megacrystic (20-40%) with megacrysts[6] up to 12 cm in length, common rapakivi texture, 5-10% biotite, trace-2% muscovite, 1-3% cordierite, rare xenoliths.

DCmgKJ — **KEJIMKUJIK MONZOGRANITE:** medium grey, fine- to coarse-grained, megacrystic (approximately 10%) with euhedral uniform-sized alkali feldspar megacrysts (1 x 2-2.5 cm), 12-16% biotite, trace-1% muscovite, xenoliths are common.

DCmgSG — **SCRAG LAKE MONZOGRANITE:** light- to medium-grey, medium- to coarse-grained, megacrystic (5-15%) with variable sized megacrysts, minor rapakivi texture, sub-rounded quartz eyes to 1.5 cm, 10-16% biotite, trace-1% muscovite, may contain trace garnet and/or cordierite, common to abundant metasedimentary (?) xenoliths (5 cm- >1 m).

DCgdSG — **SCRAG LAKE GRANODIORITE:** very similar to DCmgSG except is granodioritic in composition. Biotite content generally higher than in DCmgSG (10-22%).

DEVONIAN (?)

ODM — **MAFIC INTRUSIONS*:** area containing abundant boulders of gabbro; some peridotite and quartz gabbro; age uncertain.

ORDOVICIAN-DEVONIAN

ODWK — **WHITE ROCK and KENTVILLE FORMATIONS (undivided)*,**:** quartzite, slate, siltstone, calcareous shale (fossiliferous), rhyolite, basalt, andesite.

CAMBRO-ORDOVICIAN

MEGUMA GROUP**

ЄOH — **HALIFAX FORMATION:** siltstone and slate.

ЄOG — **GOLDENVILLE FORMATION:** metagreywacke and minor slate.

Geology modified after:

*DAKERS, R. W. G. 1982: Assessment report of exploration in Annapolis and Digby Counties; Nova Scotia Department of Mines and Energy Confidential Assessment report.

**TAYLOR, F. C. 1969: Geology of the Annapolis - St. Mary's Bay map area, (21A, 21B East Half); Geological Survey of Canada Memoir 358, 65 p.

[1] LEUCOMONZOGRANITE: A granitoid rock of monzogranite composition with less than 6% combined mafic minerals.

[2] 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).

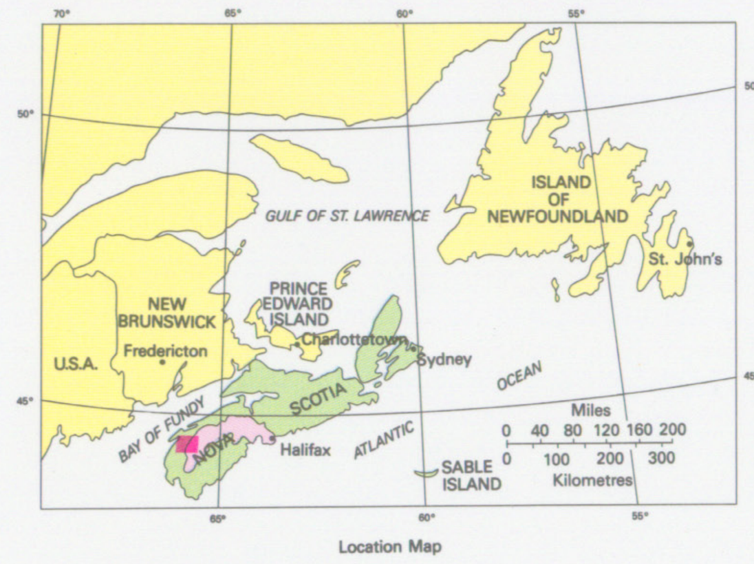
[3] PERCENT MUSCOVITE, CORDIERITE, BIOTITE: Percentage of muscovite and cordierite from visual modal estimates. Percentage of biotite from point counting and visual modal estimates.

[4] XENOLITHS ABUNDANCE: Rare - local xenoliths in some outcrop; Common - a few xenoliths in most outcrop; Abundant - few to many xenoliths in all outcrops.

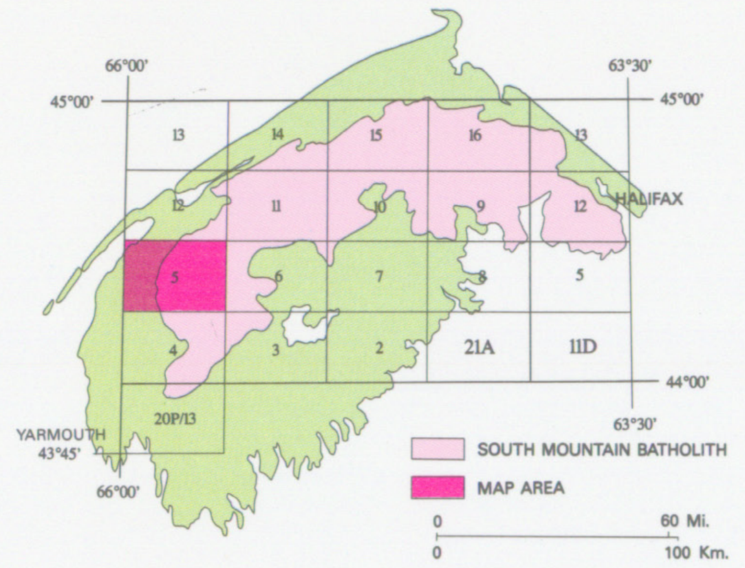
[5] MONZOGRANITE, GRANODIORITE, SYENOGRANITE: After Streckeisen (1976): To each plutonic rock its proper name; Earth Science Review, v. 12, p. 1-33.

[6] MEGACRYST: A non-genetic term for a crystal that is significantly larger than the surrounding groundmass. In the South Mountain Batholith megacrysts are predominatly 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.

[7] LEUCOGRANITE: A granitoid rock with less than 2% combined mafic minerals.



Location Map



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: ALBI-albitite; APPG-aplite with minor pegmatite; DIAB-diabase; ELVA-elvan; LUGR-leucogranite; LUMZ-leucomonzogranite; LUPO-leucoporphyry; MIAP-mica aplite; MONZ-monzogranite; PEGM-pegmatite; PEGMZ-zoned pegmatite; PGAP-pegmatite with minor aplite; PORP-porphyry; QTZ-quartz (indicated if mineralized); all unlabelled dykes are aplites; < 1 m-thin lines, > 1 m-heavy lines (inclined, vertical, dip unknown)
- Stockwork (type indicated) — QTZ
- Sheeted complex (type indicated) — QTZ
- Area of abundant dyking (type or map unit indicated) — DCgd
- 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) — 109
- Trench, adit, shaft
- Mineral occurrence (commodities indicated at top; number on bottom refers to N.S.D.N.R. mineral occurrence cards) — Sn, W A05-05
- Mine, Prospect, Quarry (active, abandoned) — Sn
- Skarn — SK

COMMON MINERAL ABBREVIATIONS

ad-andalusite; am-amethyst; ap-apatite; as-arsenopyrite; at-autunite; bi-biotite; bo-bornite; ca-calcite; cc-chalcocite; ks-cassiterite; cp-chalcopyrite; ch-chlorite; cd-cordierite; cy-chrysocola; 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-saussuritization; 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 94-04

GEOLOGICAL MAP OF

WEYMOUTH NOVA SCOTIA

(N.T.S. SHEET 21A/05)

SOUTH MOUNTAIN BATHOLITH PROJECT

M. A. MACDONALD and L. J. HAM

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, MINISTER

DARRELL D. HILTZ, 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