

LEGEND

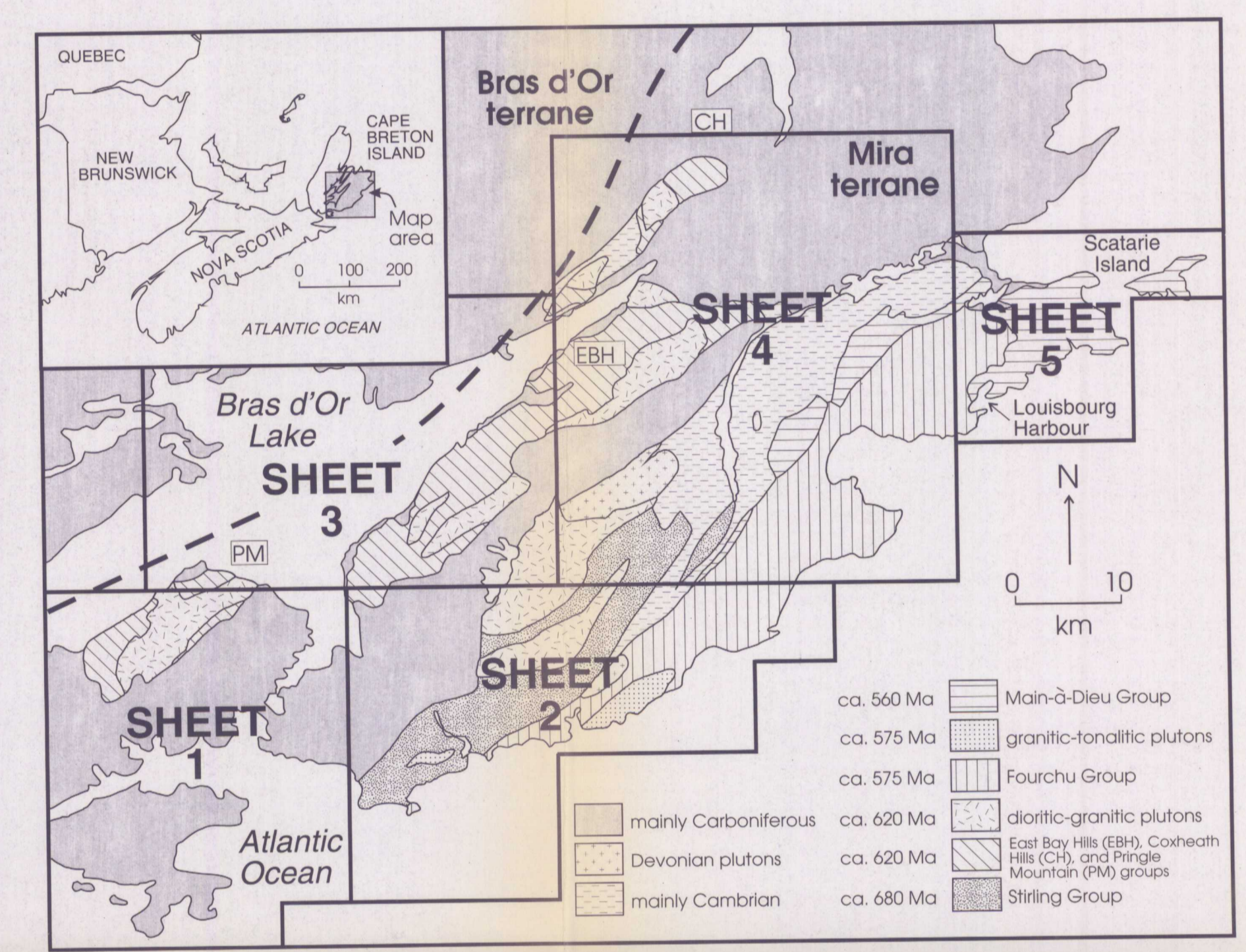
CARBONIFEROUS	
C _M	Morian Group: conglomerate, sandstone, mudstone, siltstone and shale with minor thin coal in upper part
C _R	Riverdale Group: sandstone, mudstone, siltstone with coaly debris and rare coal
C _C	Canso Group: shale, siltstone, gypsum, anhydrite, and minor limestone and breccia
C _W	Windsor Group: gypsum, anhydrite, and limestone with intercalated siltstone, sandstone, and conglomerate
C _{Sp}	St. Peters gabbro
C _H	Horton Group: conglomerate, sandstone, and shale; minor limestone
DEVONIAN - CARBONIFEROUS	
DC ₁	Undivided sedimentary rocks of the L'Ardoise block: sandstone, shale, mudstone, and conglomerate
DC ₂	Petit de Grat pluton: red to pink leucogranite
DEVONIAN	
D _M	McAdams Lake Formation: arkosic sandstone, conglomerate, shale, and felsic tuff
D _Q	Gillis Mountain Pluton: porphyritic monzogranite, monzogranite, quartz monzodiorite
D _{De}	Deep Cove Pluton: biotite monzogranite
D _{LE}	Lower St. Esprit Pluton: hornblende-biotite monzogranite
D _{RP}	Salmon River rhyolite porphyry
D _{Mm}	Miller Brook monzodiorite and similar intrusions
DEVONIAN OR OLDER	
D _g	Gabbroic sills (west of Mira River)
D ₁	Amphibolite, schist, granitoid rocks, metasedimentary rocks (mainly mylonitic) (Isle Madame area)
ORDOVICIAN(?)	
O _M	McAdams Brook Formation: quartz-rich siltstone and sandstone
CAMBRIAN	
C _{MN}	MacNeil Formation: dark grey shale, siltstone, and limestone
C _{ML}	MacLean Brook Formation: quartz sandstone, siltstone, and shale
C _T	Trout Brook Formation: shale, siltstone, and minor sandstone
C _C	Canso Brook Formation: mudstone, siltstone, and minor limestone
C _{MC}	MacCodrum Formation: siltstone and shale
C ₁	Sgadan Lake Formation: quartz arenite and quartz pebble conglomerate
LATE HADRYNIAN - CAMBRIAN	
HC _B	Bengal Road Formation: maroon to red conglomerate, sandstone, siltstone; minor grey siltstone (On Scatarie Island: HC ₁ , quartz pebble conglomerate; HC ₂ , red sandstone and siltstone; HC ₃ , grey siltstone)
HC _K	Kelvin Glen Group: orange lithic arkose, pebble to cobble conglomerate, purple subarkose, red siltstone
LATE HADRYNIAN(?) MINOR INTRUSIONS	
H _M	Monzodiorite (East Bay Hills belt)
H _{GP}	Granitic porphyry (East Bay Hills belt)
H _{GB}	Baleine gabbro (Coastal belt)
H _{IB}	Other gabbroic intrusions (Coastal belt)
H _D	Diorite (Coastal belt)
H _{GR}	Granodiorite (Coastal belt)
H _{FP}	Felsic porphyry (Coastal belt)
H _{MP}	Mafic porphyry (Stirling and Coastal belts)
H _G	Gabbro (Stirling belt)
LATE HADRYNIAN	
H _{Mb}	Main-à-Dieu Group Varied maroon to red and green heterolithic lapilli tuff; basaltic flows (H _{Mb1}); basaltic lapilli tuff; conglomerate, litharenite, and siltstone
H _{Md}	Dark grey to light grey-green andesitic to dacitic lithic lapilli tuff
H _{Me}	Varied lapilli tuff, mainly dacitic to rhyolitic; minor fine-grained tuff and laminated siltstone
H _{Mf}	Basalt flows, interlayered red conglomerate, tuffaceous arkose and tuff
H _{Mg}	Grey-green laminated siltstone; minor lithic subarkose; minor basalt
H _{Mh}	Varied maroon to buff-coloured rhyolitic lapilli tuff
H _{Mi}	Tuffaceous conglomerate; buff to green and maroon laminated siltstone; basalt (H _{Mi1})
H _{Mj}	Maroon to green conglomerate and laminated siltstone; lapilli tuff and tuffaceous conglomerate
H _{Mk}	Basaltic and andesitic lapilli tuff; tuffaceous conglomerate; thin amygdaloidal basalt flows; maroon siltstone
H _{Ml}	Varied rhyolitic lapilli tuff; rhyolitic flows; minor maroon siltstone
H _{Mm}	Basaltic flows and lapilli tuff; maroon siltstone
H _{Mn}	Little Lorraine member: lithic lapilli tuff and tuffaceous conglomerate; grey-green laminated siltstone; very coarse lapilli tuff (H _{Mn1}); numerous dacitic porphyry sills & plugs (H _{Mn2})
H _{PU}	Plutonic units (ca. 575 Ma) Point Michaud leucogranite
H _K	Kennington Cove pluton: tonalite
H _B	Belfrey Gut pluton: monzogranite
H _C	Capelin Cove Pluton: monzogranite, leucogranite, granodiorite
H _{GR}	Grand River pluton: leucogranite

H _{FB}	Fourchu Group Basaltic lapilli tuff and breccia; basaltic flows (locally amygdaloidal); minor litharenite
H _{FC}	Grey-green crystal-rich dacitic tuff and lithic lapilli tuff; minor rhyolitic lapilli tuff and siliceous laminated tuff
H _{FD}	Dark grey to black fine-grained massive andesitic tuffs and flows; basaltic tuffs and flows; dark grey to black dacitic crystal-rich tuff; minor litharenite and siltstone
H _{FE}	Black to grey fine-grained andesitic lapilli tuffs and flows
H _{FF}	Dacitic to rhyolitic crystal-rich lithic lapilli tuff; fine-grained rhyolitic tuff and chert; minor rhyolitic flows
H _{FG}	Gabarus member: grey-green dacitic to andesitic crystal-rich lithic lapilli tuff; abundant basaltic lenses (H _{FG1})
H _{FI}	Dacitic to rhyolitic lapilli tuff and tuffaceous conglomerate; mainly red to maroon
H _{FK}	Kennington Cove member: dacitic quartz-feldspar lapilli tuff and tuff (H _{FK1}); intermediate fine-grained tuff and crystal tuff; H _{FK2} , quartz-feldspar crystal tuff
H _{FL}	Basaltic and andesitic lapilli tuffs and flows(?)
H _{FM}	Fourchu Head member: dacitic to rhyolitic lapilli tuff; minor basaltic to andesitic flows and fine-grained tuffs (H _{FM1}); dacitic to andesitic lithic tuff and lithic-crystal tuff, fine-grained dacitic tuff, minor basaltic to dacitic flows; H _{FM2} , dacitic to rhyolitic crystal-lithic tuff; H _{FM3} , grey, green, and purple lithic tuff and fine-grained slaty tuff, minor basaltic to andesitic flows; H _{FM4} , grey intermediate lithic-crystal tuff
H _{PL}	Plutonic units (ca. 620 Ma) Sporting Mountain Pluton Granodiorite transitional to monzogranite Tonalite Sheared granitoid and volcanic rocks
H _{CH}	Coxheath Hills Pluton Granodiorite Quartz monzodiorite Dioritic rocks Gabbro
H _{SP}	Spruce Brook Pluton Monzogranite granodiorite Dioritic rocks
H _{ML}	MacEachern Lake Pluton Monzogranite, minor granodiorite Granodiorite, minor monzogranite Quartz diorite, minor diorite and quartz monzodiorite
H _H	Huntington Mountain Pluton Syenogranite Leucogranite Monzogranite Granodiorite Dioritic rocks
H _{IC}	Irish Cove Pluton Monzogranite
H _{CS}	Chisholm Brook Suite Granodiorite Quartz monzodiorite Dioritic rocks
H _{FM}	Fringle Mountain Group Varied basaltic to rhyolitic lapilli tuff and ash tuff; minor rhyolitic flows
H _{CG}	Coxheath Group Rhyolitic tuff, lapilli tuff, and flows; minor basaltic to dacitic layers/lenses and tuffaceous sedimentary rocks
H _{CA}	Andesitic tuff, lapilli tuff, and flows; minor rhyolitic and basaltic lenses
H _{CB}	Basaltic flows, tuff, and lapilli tuff; minor rhyolitic, dacitic, and andesitic lenses
H _{EP}	East Bay Hills Group Pink, brown and maroon rhyolitic lapilli tuff, tuff, and flows; H _{EP1} =Johnstown area; H _{EP2} =Morley Road area
H _{FB}	Basaltic flows, commonly amygdaloidal, locally plagioclase-phyric; basaltic lapilli tuff; minor slaty tuff and tuffaceous conglomerate
H _{FD}	Andesitic to dacitic crystal-rich tuff and lapilli tuff; minor rhyolitic tuff
H _{FE}	Varied andesitic, dacitic, and rhyolitic lapilli tuff and crystal-rich tuff (H _{FE1}); mainly rhyolitic tuff (H _{FE2}); mainly andesitic tuff with rhyolitic flow or tuff lenses (H _{FE3})
H _{FG}	Andesitic crystal-rich tuff and lapilli tuff (H _{FG1}); rhyolitic tuff (H _{FG2}); laminated siltstone (H _{FG3})
H _{FI}	Basaltic to andesitic lapilli tuff and flows; minor tuffaceous conglomerate and litharenite
H _{FK}	Dark grey to black dacitic lapilli tuff; minor basaltic to andesitic tuff
H _{FL}	Amygdaloidal basalt; porphyritic basalt; basaltic to andesitic tuff and lapilli tuff
H _{FM}	Varied grey-green andesitic to dacitic lapilli tuff, mainly strongly cleaved; minor rhyolitic tuff
H _{FN}	Stirling Group Rhyolite flows(?) & lapilli tuff, minor andesite lapilli tuff
H _{FO}	Basalt-andesite-dacite flow breccias
H _{FP}	Basalt-andesite flows, flow breccia, minor lapilli tuff
H _{FQ}	Litharenite, conglomerate (H _{FQ1}), siltstone, chert & dolostone
H _{FR}	Andesite lapilli tuff & ash tuff, minor dacite lapilli tuff
H _{FS}	Lapilli tuff & ash tuff, rhyolite flows(?)
H _{FT}	Rhyolite porphyry

SYMBOLS

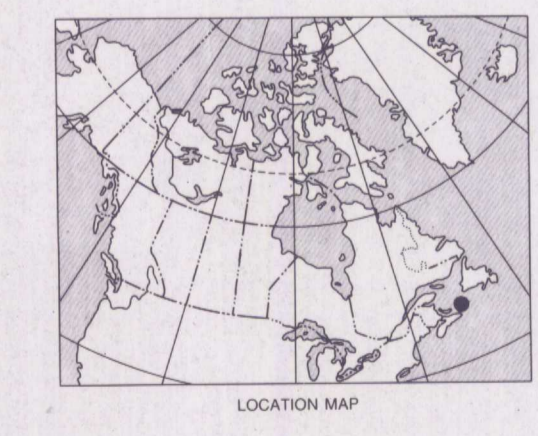
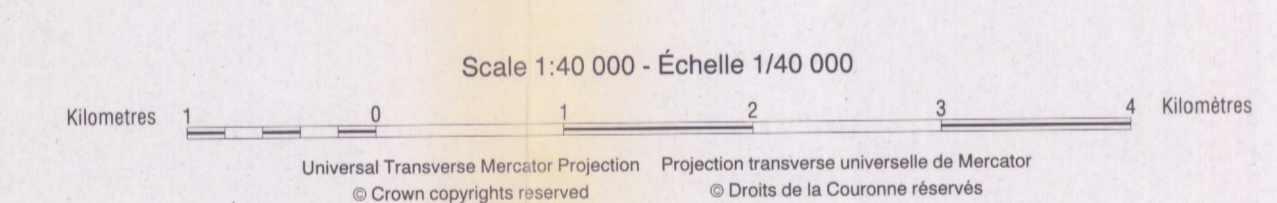
- X ⓧ Rock outcrop, area of outcrop, float/possible outcrop
- Geological boundary (defined, approximate, assumed)
- ~ Fault (defined, approximate, assumed)
- 23 / 67 Bedding, tops known (inclined, vertical, overturned)
- 27 / Bedding, tops unknown (inclined, vertical)
- ↗ Younging direction
- 70 / Foliation (inclined, vertical)
- 12 / Flow foliation (inclined, vertical)
- 35 Lineation
- 56 Axis of minor fold
- * Mineral occurrence, prospect (Cu, copper; Mo, molybdenum; Pb, lead; Zn, zinc; Ag, silver; Bi, bismuth; Py, pyrite)
- Drill core location

Notes:
These maps are a supplement to the following report and accompanying map, and provide more detail about outcrop locations, subdivisions of major map units, and distribution of minor intrusions:
Barr, S.M., White, C.E., and Macdonald, A.S., in press. Stratigraphy, tectonic setting, and geological history of Late Precambrian volcanic - sedimentary - plutonic belts in southeastern Cape Breton Island, Nova Scotia. Geological Survey of Canada Bulletin 468, accompanied by Map 1853A.
Barr, S.M., White, C.E., and Macdonald, A.S., in press. Geology, southeastern Cape Breton Island, Nova Scotia. Geological Survey of Canada Map 1853A. Scale 1:100,000 (in colour).
Distribution and description of Devonian and Carboniferous sedimentary units taken mainly from Boehner and Prime (1985) and Boehner and Giles (1986).



GEOLOGY AND LOCATION MAP FOR OPEN FILE 2732

OPEN FILE 2732
SHEET 6 OF 6
GEOLOGY
SOUTHEASTERN CAPE BRETON ISLAND
NOVA SCOTIA



COOPERATION
COOPERATION AGREEMENT ON MINERAL DEVELOPMENT
ENTENTE DE COOPÉRATION SUR L'EXPLOITATION MINÉRIALE
Contribution to Canada-Nova Scotia Cooperation Agreement on Mineral Development 1982-1985. A subsidiary agreement under the Economic and Regional Development Agreement.
Contribution à l'Entente de coopération Canada-Nouvelle-Écosse sur l'exploitation minérale 1982-1985. Une entente subsidiaire régissant en vertu de l'Entente Canada-Nouvelle-Écosse de développement économique et régional.