

GEOLOGICAL MAP of the HARBOUR BRETON COMPLEX, Fortune Bay, NEWFOUNDLAND

LEGEND -- HARBOUR BRETON GEOLOGICAL MAP

Post-Devonian:
D DYKES and VEINS:
 Dp: ENE-trending 2 to 50 cm wide quartz veins, locally host orange K-feldspars.
 Dd: Undivided aphanitic and fine-grained green diabase dykes, brown-green hornblende-phyric silicic dykes, and medium-grained black quartz diorite dykes.

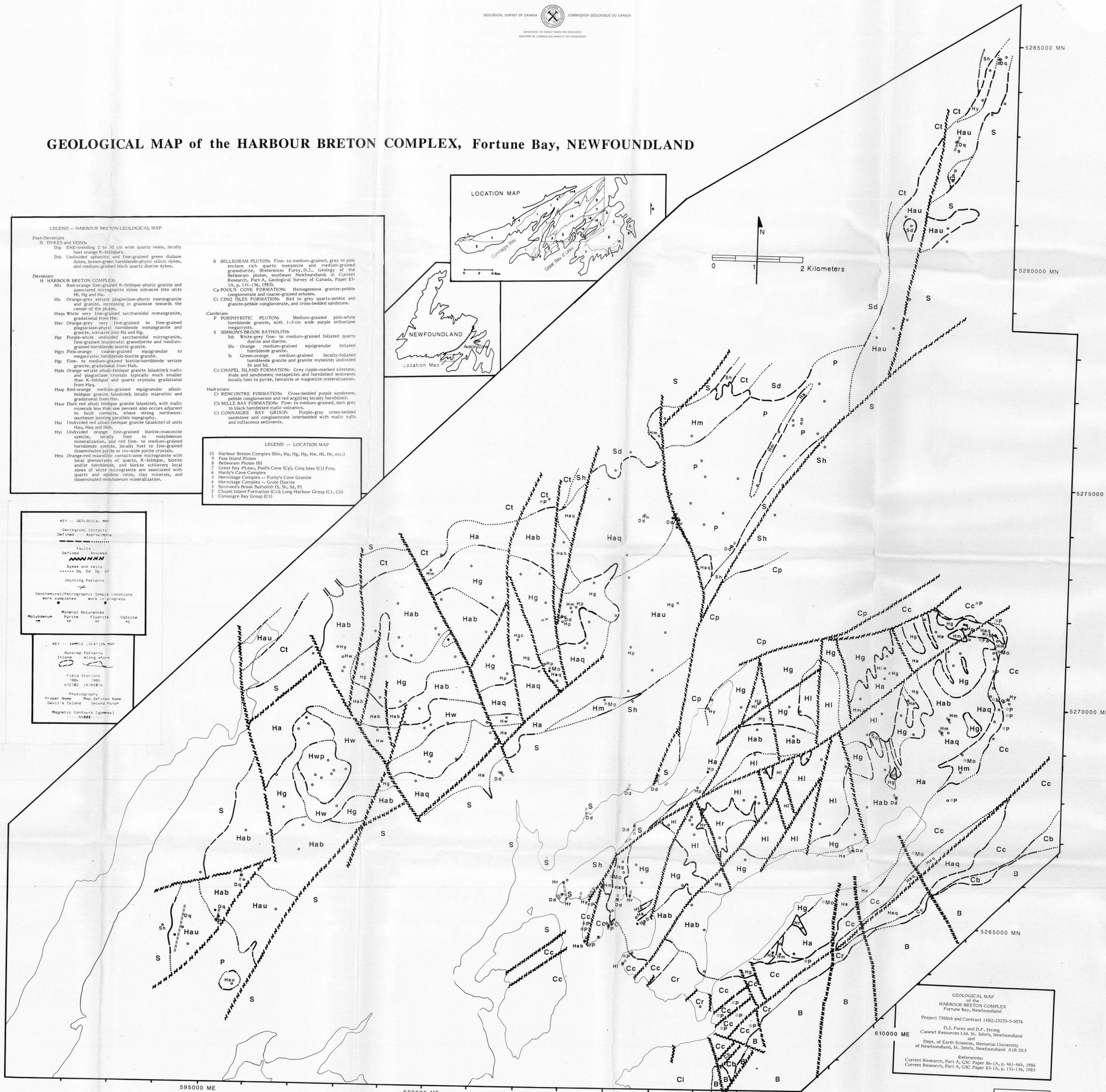
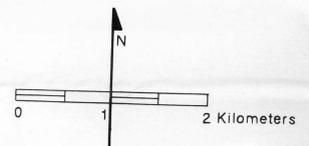
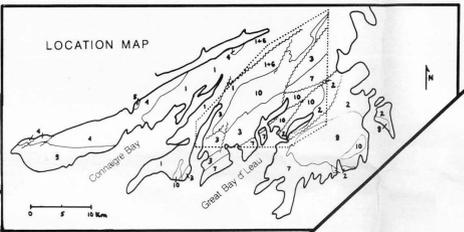
Devonian:
H HARBOUR BRETON COMPLEX:
 Hr: Red-orange fine-grained K-feldspar-phyric granite and associated microgranite dykes intrusive into units H1, Hg and Ha.
 Hb: Orange-grey seriate plagioclase-phyric monzogranite and granite, increasing in grain size towards the center of the pluton.
 Hwp: White very fine-grained saccharoidal monzogranite, gradational from Hw.
 Hw: Orange-grey very fine-grained to fine-grained plagioclase-phyric hornblende monzogranite and granite, intrusive into Ha and Hg.
 Hps: Purple-white undivided saccharoidal microgranite, fine-grained leucocratic granodiorite and medium-grained hornblende-biotite granite.
 Hgc: Pink-orange coarse-grained equigranular to megacrystic hornblende-biotite granite.
 Hg: Fine- to medium-grained biotite-hornblende seriate granite, gradational from Hab.
 Hab: Orange seriate alkali-feldspar granite (alaskite) mafic and plagioclase crystals typically much smaller than K-feldspar and quartz crystals; gradational from Hau.
 Haq: Red-orange medium-grained equigranular alkali-feldspar granite (alaskite); locally miarolitic and gradational from Hm.
 Hau: Dark red alkali feldspar granite (alaskite), with mafic minerals less than one percent also occurs adjacent to fault contacts, where strong northwest-southeast jointing parallels topography.
 Ha: Undivided red alkali-feldspar granite (alaskite) of units Hau, Haq and Hab.
 Hy: Undivided orange fine-grained biotite-muscovite syenite, locally host to molybdenum mineralization, and red fine- to medium-grained disseminated pyrite or ore-wide pyrite crystals.
 Hm: Orange-red miarolitic contact-zone microgranite with local phenocrysts of quartz, K-feldspar, biotite and/or hornblende, and biotite schlieren; local zones of white microgranite are associated with quartz and epidote veins, clay minerals, and disseminated molybdenum mineralization.

B BELLEORAM PLUTON: Fine- to medium-grained, gray to pink enclave rich quartz monzonite and medium-grained granodiorite. (Reference: Furey, D.J., Geology of the Belleoram pluton, southeast Newfoundland; in Current Research, Part A, Geological Survey of Canada, Paper 83-1A, p. 151-156, 1983).
Cp POOL'S COVE FORMATION: Homogeneous granite-pebble conglomerate and coarse-grained arkoses.
Ci CING ISLES FORMATION: Red to grey quartz-pebble and granite-pebble conglomerate, and cross-bedded sandstone.
Cambrian:
P PORPHYRYTIC PLUTON: Medium-grained pink-white hornblende granite, with 1-3 cm wide purple orthoclase megacrysts.
S SIMMONS BROOK BATHOLITH:
 Sd: White-grey fine- to medium-grained foliated quartz diorite and diorite.
 Sh: Orange medium-grained equigranular foliated hornblende granite.
 St: Green-orange medium-grained locally-foliated hornblende granite and granite mylonites; undivided Sh and Sd.
Cc CHAPEL ISLAND FORMATION: Grey ripple-marked siltstone, shale and sandstones; metapelites and hornfelsed sediments locally host to pyrite, hematite or magnetite mineralization.
Hadrynian:
Cr RENCONTRE FORMATION: Cross-bedded purple sandstone, pebble conglomerate and red argillites locally hornfelsed.
Cb BELLE BAY FORMATION: Fine- to medium-grained, dark grey to black hornfelsed mafic volcanics.
Ct CONNAGRE BAY GROUP: Purple-grey cross-bedded sandstone and conglomerate interbedded with mafic tuffs and tuffaceous sediments.

LEGEND -- LOCATION MAP
 10 Harbour Breton Complex (Hm, Ha, Hg, Hp, Hw, H1, Hr, etc.)
 9 Pass Island Pluton
 8 Belleoram Pluton (B)
 7 Great Bay d'Espoir, Pool's Cove (Cp), Cing Isles (Ci) Fms.
 6 Hardy's Cove Complex
 5 Hermitage Complex -- Furby's Cove Granite
 4 Hermitage Complex -- Grole Diorite
 3 Simmons's Brook Batholith (S, Sh, Sd, P)
 2 Chapel Island Formation (Cc); Long Harbour Group (Cr, Cb)
 1 Connagre Bay Group (Ct)

KEY -- GEOLOGICAL MAP
 Geological Contacts
 Defined: Assumed
 Faults: Defined Assumed
 Dykes and veins: Dd, Dp, Dq, Dr
 Jointing Patterns
 Geochemical/Petrographic Sample Locations: Work completed, Work in progress
 Mineral Occurrences: Molybdenum, Pyrite, Fluorite, Calcite

KEY -- SAMPLE LOCATION MAP
 Outcrop Patterns: Inland, Along shore
 Field Stations: 1984, 1985, 472/82 (Kilograms)
 Physiography: Proper Name, Map-defined Name, Devil's Island, Second Pond
 Magnetic Contours (gomas): 55000



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 References:
 Current Research, Part A, GSC Paper 86-1A, p. 461-464, 1986
 Current Research, Part A, GSC Paper 83-1A, p. 151-156, 1983