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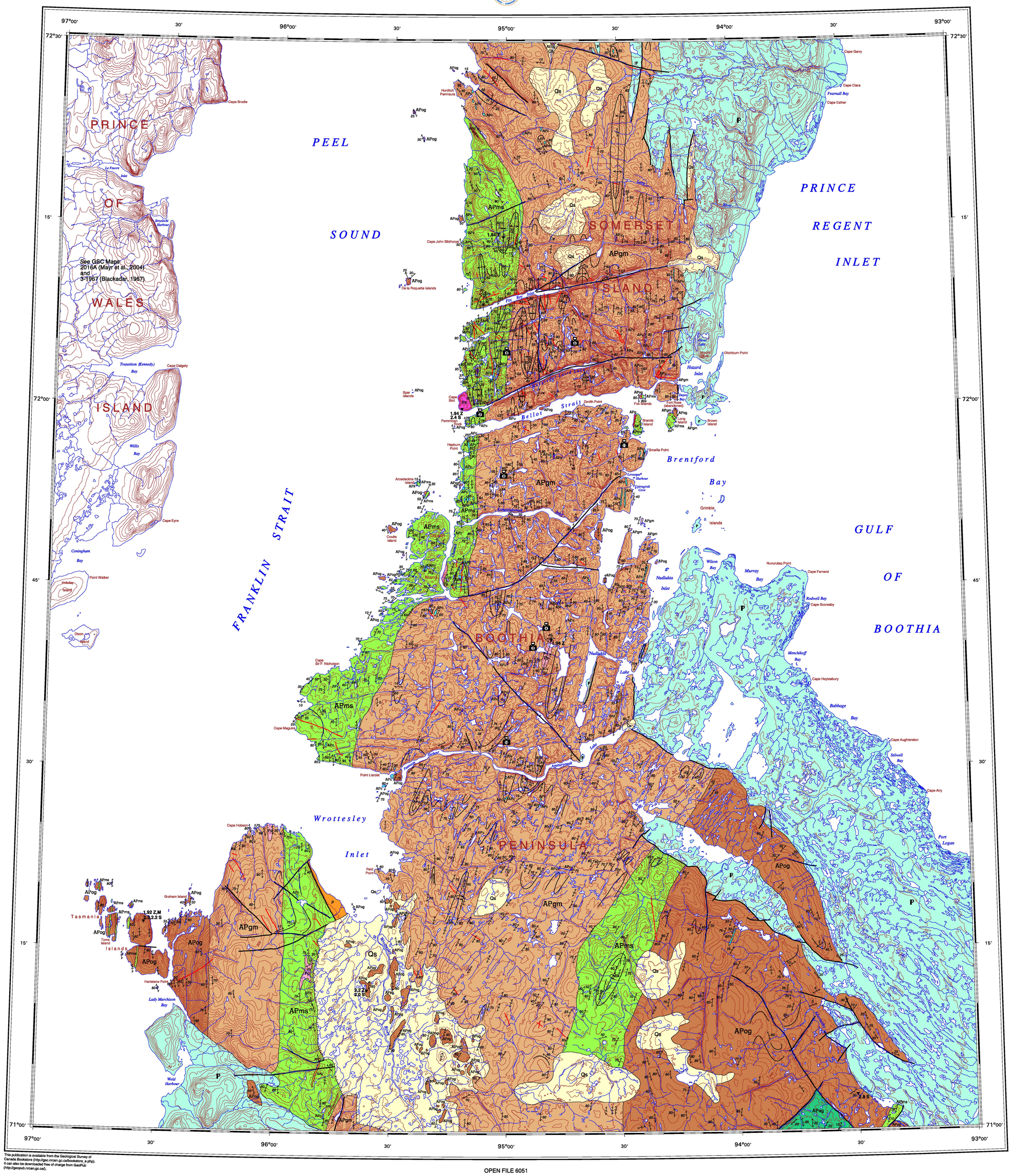
GEOLOGICAL SURVEY OF CANADA / COMMISSION GÉOLOGIQUE DU CANADA



LEGEND

This legend is common to Sheet 1 and 2.
Coloured legend blocks indicate map units that appear on this map.
Not all symbols shown in the legend appear on this map.

QUATERNARY

Qs — *Stream, deltaic, glacial, and marine beach sediments (mapped only where underlying bedrock geology could not be inferred with reasonable certainty).*

Qf — *Felsenmeer, mantling, and derived from, gneiss.*

PALEOGENE

P — *EUREKA SOUND FORMATION: sandstone, siltstone, shale, minor conglomerate.*

PALEOZOIC

P — *Sedimentary rocks: mainly limestone, dolostone, sandstone, siltstone, shale, and conglomerate.*

MESOPROTEROZOIC AND NEOPROTEROZOIC

Diabase dyke.

MESOPROTEROZOIC

PH — *HUNTING FORMATION: dolostone, minor shale, siltstone, and sandstone.*

Gabbro sills and plugs.

PA — *ASTON FORMATION: quartz sandstone, minor shale, siltstone, and conglomerate.*

PALEOPROTEROZOIC

M'Clure Bay granite:

K-feldspar-quartz porphyry dyke.

PMa — *Anorthosite; pale green or grey on fresh surface, white on weathered surface; coarse-grained.*

PMg — *Granite; pink; coarse-grained, massive to K-feldspar-phyric; extensively weathered to grus.*

Ps — *Two-pyroxene syenite; brown-weathering; medium-grained, weakly to moderately foliated; consisting of perthite, orthopyroxene, clinopyroxene, and minor quartz.*

Pp — *Perthosite; dull red; medium-grained, weakly foliated; consisting of perthite (>90%), minor Na-clinopyroxene and accessory titanite.*

ARCHEAN AND/OR PALEOPROTEROZOIC

NOTE: relative ages of Archean and/or Paleoproterozoic map units are uncertain.

APg — *Granite; red; massive; interpreted to be of anatectic origin.*

APag — *Amphibolite facies granitoid gneiss with biotite and rare pseudomorphs after orthopyroxene; interpreted to be, in part at least, retrograded from granulite facies.*

APif — *Metamorphosed silicate facies iron formation: garnetite and orthopyroxene-quartz-garnet rock on Arcedeckne Island; orthopyroxene-magnetite-quartz rock on Boothia Peninsula.*

APu — *Ultramafic rock: metaperidotite (commonly serpentinized), pyroxenite, hornblendite; occurring as lenses, sheets, and boudins, typically associated with supracrustal rocks.*

APgm — *Orthopyroxene-bearing granitoid gneiss and supracrustal rocks interlayered on a scale of tens to hundreds of metres.*

APc — *Marble and calc-silicate rocks; commonly coarse-grained and white-weathering; containing one or more of diopside, forsterite, and wollastonite; locally serpentinized.*

APms — *Supracrustal rocks: pelitic garnet- and biotite-rich gneiss, commonly with one or more of sillimanite, cordierite and graphite; commonly rusty-weathering and migmatitic; subordinate pyritbolite, marble, calc-silicate gneiss, quartzite, and orthopyroxene-bearing granitoid gneiss.*

APog — *Orthopyroxene-bearing granitoid gneiss; generally well-foliated (with platy quartz) but locally almost massive; commonly with biotite and subordinate garnet and/or hornblende; locally with abundant, concordant, pink, granitic to pegmatitic layers and sheets, which commonly contain garnet and pseudomorphs after orthopyroxene, or mafic schlieren; locally retrograded to pink- to red-weathering, microcline-rich gneiss; subordinate metasedimentary rocks, including pelitic gneiss, marble and calc-silicate rocks, and pyribolite.*

Geological boundary, approximate
Gneissosity, schistosity (horizontal, inclined, vertical, dip unknown)
Lineation, fold axis
Fault
Fault line scarp
Antiform
Synform
Antiform (overturned)
Synform (overturned)
Gneissosity, schistosity, general trend
Sulphide-rich zone, horizon — SRZ
Location of radiometrically dated sample; age in Ga
Z: zircon U-Pb; M: monazite U-Pb; T: titanite U-Pb; S: Sm-Nd T_{DM} — 1.84 T
Location of field photograph with corresponding figure number

Author: T. Frisch

Geological compilation by T. Frisch, 2009

Geology of Precambrian crystalline terrane by T. Frisch, 1986, 1987, 1990, 1992, with contributions by M.R. Digel, R.K. Herd, H.A.I. Sandeman, F.C. Taylor, and E.J. Williams.
Additional sources: Kerr and de Vries (1976,1977); C.D.S. de Vries (unpub. work, 1975,1976); Stewart and Kerr (1984). Compilation and interpretation by T. Frisch.
Geology of Aston and Hunting formations and Phanerozoic bedrock geology generalized after (Stewart and Kerr, 1984) with additions by T. Frisch.
Geology of Quaternary deposits adapted from GSC Maps 1555A and 1570A (Dyke, 1983,1984).

Digital cartography by D. Viner, Data Dissemination Division (DDD)

This map was produced from processes that conform to the Scientific and Technical Publishing Services Subdivision (DDD) Quality Management System, registered to the ISO 9001: 2008 standard

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Digital base map from data compiled by Geomatics Canada, modified by DDD

Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area

Elevations in metres above mean sea level

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LOCATION MAP

OPEN FILE 6051

GEOLOGY

PRECAMBRIAN GEOLOGY OF NORTHERN BOOTHIA PENINSULA AND SOMERSET ISLAND

NUNAVUT

Scale 1:250 000/Échelle 1/250 000

kilometres 5 0 5 10 15 20 kilomètres

Universal Transverse Mercator Projection
North American Datum 1983

Projection transverse universelle de Mercator
Système de référence géodésique nord-américain, 1983

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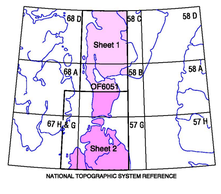

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE

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GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
2011
SHEET 2 OF 2
FEUILLET 2 DE 2

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Sheet 2 of 2, Geology

Recommended citation:

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