

PALEOZOIC
Ccg DEER LAKE BASIN (Carboniferous): conglomerate and arenaceous redbeds

Dg DEVILS ROOM GRANITE (ca. 380 Ma): megacrystic to equigranular two-mica granite and hornblende-biotite granite

SDu Undifferentiated rocks (Silurian and Siluro-Devonian)

CO Autochthonous platform to megacephalic rocks (Cambrian to Middle Ordovician), sandstone, carbonate, and shale west of the Long Range Inlier, metamorphosed to quartzite, marble, and schist in the south and east

ICB BRADORE FORMATION (Lower Cambrian): red to pale pink and maroon arkosic sandstone, minor quartz-pebble conglomerate

PROTEROZOIC

Pb LIGHTHOUSE COVE FORMATION (ca. 615 Ma): basal

LONG RANGE INLIER

Long Range dykes - feeder dykes to the Lighthouse Cove Formation

GRENVILLE PLUTONIC ROCKS (ca. 1056 Ma to 970 Ma)
LAKE MICHEL INTRUSIVE SUITE (ca. 1023 to 970 Ma)

* Ppk Megacrystic biotite ± hornblende granite

* Pg Biotite ± hornblende granite

Pgr Hornblende-biotite granite, locally megacrystic

Epg Plagioclase-megacrystic biotite-hornblende granite

Exgk Megacrystic hornblende + biotite ± pyroxene granodiorite to granite

Pgx Hornblende ± biotite ± pyroxene quartz monzonite to granite; locally contains plagioclase megacrysts

POTATO HILL PLUTON (ca. 1056 Ma)

Pcg Coronitic charnockite

Pgg Garnetiferous biotite + hornblende granite

Phg Mesocratic megacrystic hornblende + biotite granite

Pgd Biotite + hornblende granodiorite

UNCORRELATED CHARNOCKITIC PLUTON (absolute age not known)

Pom Orthopyroxene monzonite

HYBRID ROCKS

Pgnk Mixed assemblage of megacrystic granite and quartzfeldspathic gneiss

Taylor Brook Gabbro Complex (absolute age not known)

Pgb Olivine gabbro

Epgb Pegmatic gabbro

LONG RANGE GNEISS COMPLEX (> ca. 1550 Ma*)
ORTHOGNEISS (may include some paragneiss rocks)

Pqdn Flecky-textured quartz dioritic to granodioritic hornblende-biotite gneiss

Pgn Granitic to granodioritic biotite gneiss, locally migmatitic

Phgn Streaky-textured hornblende-biotite (+pyroxene, +garnet) granitic gneiss

Ptn Orthopyroxene-bearing tonalitic gneiss

Pqs Quartz-rich muscovite-chlorite ± biotite ± amphibole schistose and phyllitic rocks

Pbs Plagioclase-megacrystic quartz dioritic biotite schist

Psn Schistose quartz dioritic-tonalitic biotite gneiss

Pdn Amphibolite, dioritic gneiss, mesocratic to mafic gneiss

PARAGNEISS

Ecs Marble, calc-silicate rock

Epn Pelitic gneiss, locally with quartzite or mafic gneiss

Pqn Quartzite, quartz-rich gneiss

* Granitic rocks occur in coastal plutons elsewhere in the inlier. Unless otherwise indicated "megacrystic" refers to the presence of quartzofeldspathic gneiss. Relative ages of different gneissic units are not known.

• Minimum age for the igneous (?) protolith of quartzofeldspathic gneiss. Relative ages of different gneissic units are not known. Isotopic ages for the Grenville plutons and the Long Range gneiss complex are based on U-Pb (zircon) data from H. Baidsgaard (pers. comm., 1989). The Long Range dykes were dated by the U-Pb (zircon, baddeleyite) method (Ramo et al., 1989).

Geological boundary (approximate, assumed)
Bedding inclined (top known, unknown)... Schistosity horizontal, inclined, vertical, dip unknown... Gneissosity (horizontal, inclined, vertical, dip unknown)... Lineation (mineral or crenulation)... Minor fold axis (inclined)... High angle shear sense unknown (folded, approximate, assumed)... Thrust or reverse fault (approximate)... Glacial striations (ice direction, unknown)... Mineral occurrence...MINERALS
Gold prospect..... Au
Copper showing..... Cu
Uranium showing or indication..... U

Geology by H.H. Bostock 1969-1971; P. Erdmer 1984-1986; J.V. Owen 1985-1987

Geological compilation by J.V. Owen, 1988

Geological cartography by the Geological Survey of Canada

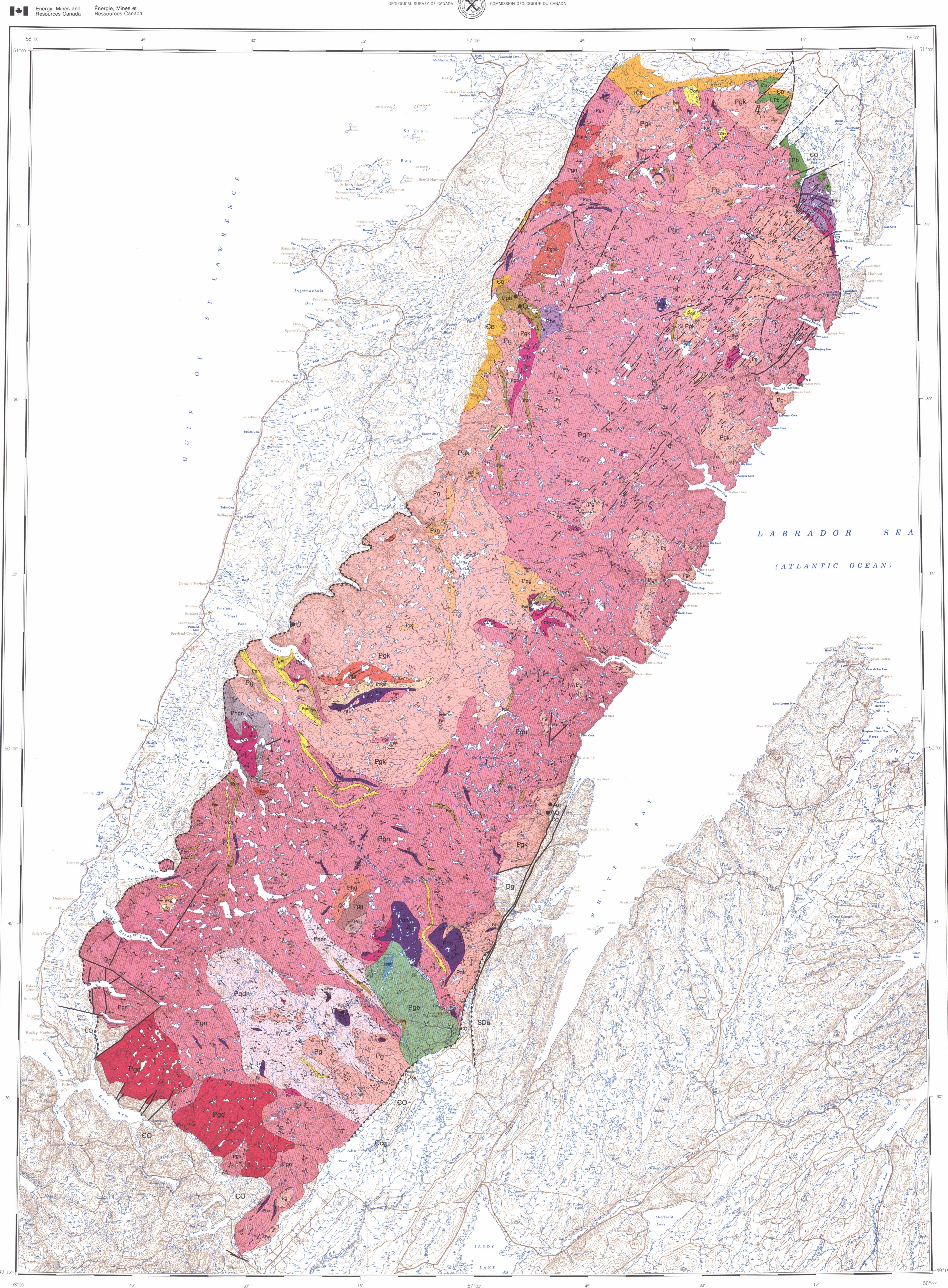
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Copies of the topographic editions covering this map area may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, Ontario, K1A 0E9

Mean magnetic declination 1990, 26°05' West, decreasing 7.0' annually. Readings vary from 26°05' in the NE corner to 24°47' W in the SW corner of the map

Elevations in feet above mean sea level

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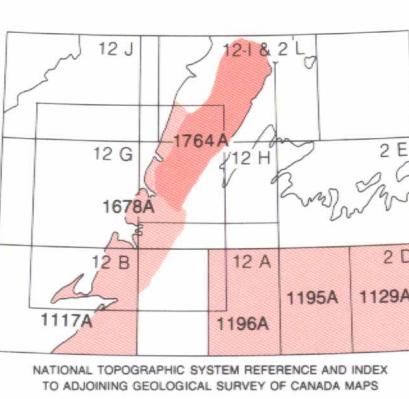
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DEPARTMENT OF MINES AND ENERGY
GOVERNMENT OF NEWFOUNDLAND AND LABRADOR



MAP 1764A GEOLOGY LONG RANGE INLIER NEWFOUNDLAND

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