

GEOLOGY OF THE PIPESTONE POND AREA

(12A/1, NE; 12A/8 E)
NEWFOUNDLAND

LEGEND

DEVONIAN OR OLDER

13 **Granitoid rocks:** strongly deformed; locally gneissic, porphyritic biotite granite and granodiorite; locally includes semipelite and amphibolite inclusions

LOWER TO MIDDLE ORDOVICIAN

12 **Spruce Brook Formation:** predominantly quartzose sandstone and quartzite, lesser amounts of intercalated pelite, variably metamorphosed in greenschist to upper amphibolite facies

11 **Undivided metasedimentary and volcanic rocks:** 11a - medium grained, quartzose metasedimentary rocks; lesser amounts of intercalated pelitic and semipelite material; 11b - garnet-biotite- and staurolite-bearing pelite and semipelite schist, locally with andalusite; 11c - micaceous, garnetiferous gneissic rocks, locally migmatized; minor felsic volcanic rocks northwest of Cold Spring Pond

10 **Cold Spring Pond Formation:** predominantly epiclastic rocks, including greywacke, polymictic conglomerate, black argillite; 10a - green argillite, sandstone, siltstone (dominantly turbidites); minor conglomerate; 10b - polymictic pebble to boulder conglomerate; 10c - dark grey to black felsic crystal and lapilli tuff; 10d - North Salmon Dam Basalt pillow lava; lesser amounts of massive basalt; minor hyaloclastite

9 **Undivided metasedimentary and metavolcanic (?) rocks:** 9a - pebble to cobble, polymictic conglomerate; locally interbedded quartzofeldspathic, volcaniclastic rocks; 9b - predominantly green chloritic schist (probably mafic metavolcanic rocks)

BAIE D'ESPOIR GROUP

8 **North Steady Pond Formation:** predominantly volcaniclastic sedimentary rocks; lesser amounts of felsic volcanic rocks; 8a - green argillite; siltstone; fine grained, graded sandstone; lesser amounts of black argillite and shale; 8b - green, fine to medium grained, unstratified, quartzofeldspathic, epiclastic sandstone + conglomerate; 8c - polymictic, pebble to boulder conglomerate, minor sandstone; 8d - dominantly felsic pyroclastic rocks; quartz-feldspar porphyry and/or crystal tuff, lapilli tuff, volcanic breccia, possible rhyolite flows, minor black argillite

7 **Salmon River Dam Formation:** Fine to medium grained, thickly bedded and laminated, dark grey to purplish sandstone, lesser siltstone

OPHOLITIC ROCKS (designation "p" on the map indicates Pipestone Pond Complex)

6 **Mafic volcanic rocks:** predominantly pillow lava, minor pillow breccia, commonly variolitic; lesser amounts of massive basalt; mafic tuff and/or epiclastic rocks

5 **Plagiogranite:** medium to coarse grained trondhjemite and tonalite; includes minor diabase dykes

4 **Gabbro:** dominantly medium- to coarse-grained, equigranular pyroxene gabbro; includes dykes and pods of fine- to medium-grained diabase, pegmatitic gabbro and plagiogranite, basal areas contain pyroxene layers

3 **Pyroxenite:** coarse- to medium-grained, locally interlayered with gabbro

2 **Banded pyroxenite and peridotite:** locally highly carbonitized

1 **Peridotite:** massive, brown-weathering harzburgite, variably serpentinized, commonly with pyroxene phenocrysts and disseminated chromite, lesser amounts of dunite; 1a - highly sheared and serpentinized peridotite, locally talc-magnesite schist

SYMBOLS

- Geological boundary (defined, approximate, assumed, gradational).....
- Fault (defined, approximate, assumed).....
- Bedding, tops known (inclined, vertical, overturned).....
- Bedding, tops unknown (inclined, vertical).....
- Cleavage, schistosity; first generation (inclined, vertical).....
- Cleavage, schistosity; second generation (inclined, vertical).....
- Axis of minor folds; first generation (inclined).....
- Axis of minor folds; second generation (inclined).....
- Shear zone (inclined, vertical, dip unknown).....
- Rock outcrop.....
- Mineral occurrence (chalcopyrite, pyrrhotite, pyrite, chromite)..... X ch, py, pr, cr
- Metamorphic isograds (biotite, andalusite).....
- Limit of geological mapping.....

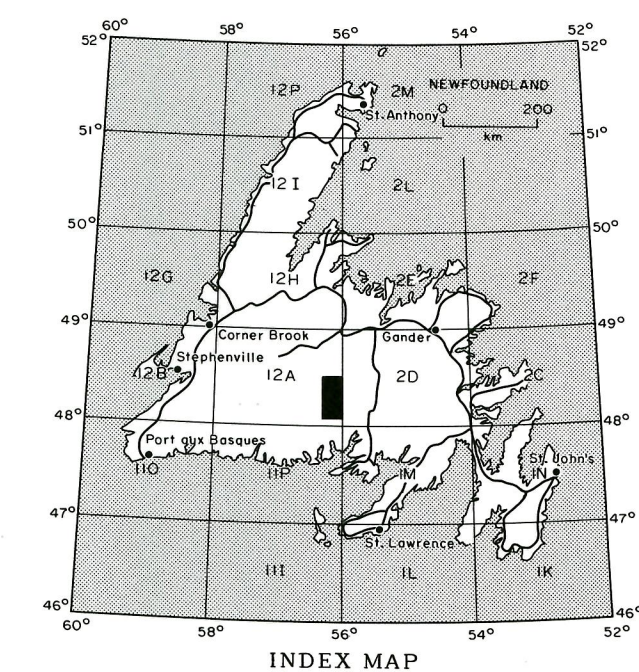
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This map is subject to review and revision.

Copies of this map may be obtained from the Publications and Information Section, Geological Survey Branch, Department of Mines, P.O. Box 4750, St. John's, Newfoundland, A1C 5T7.

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