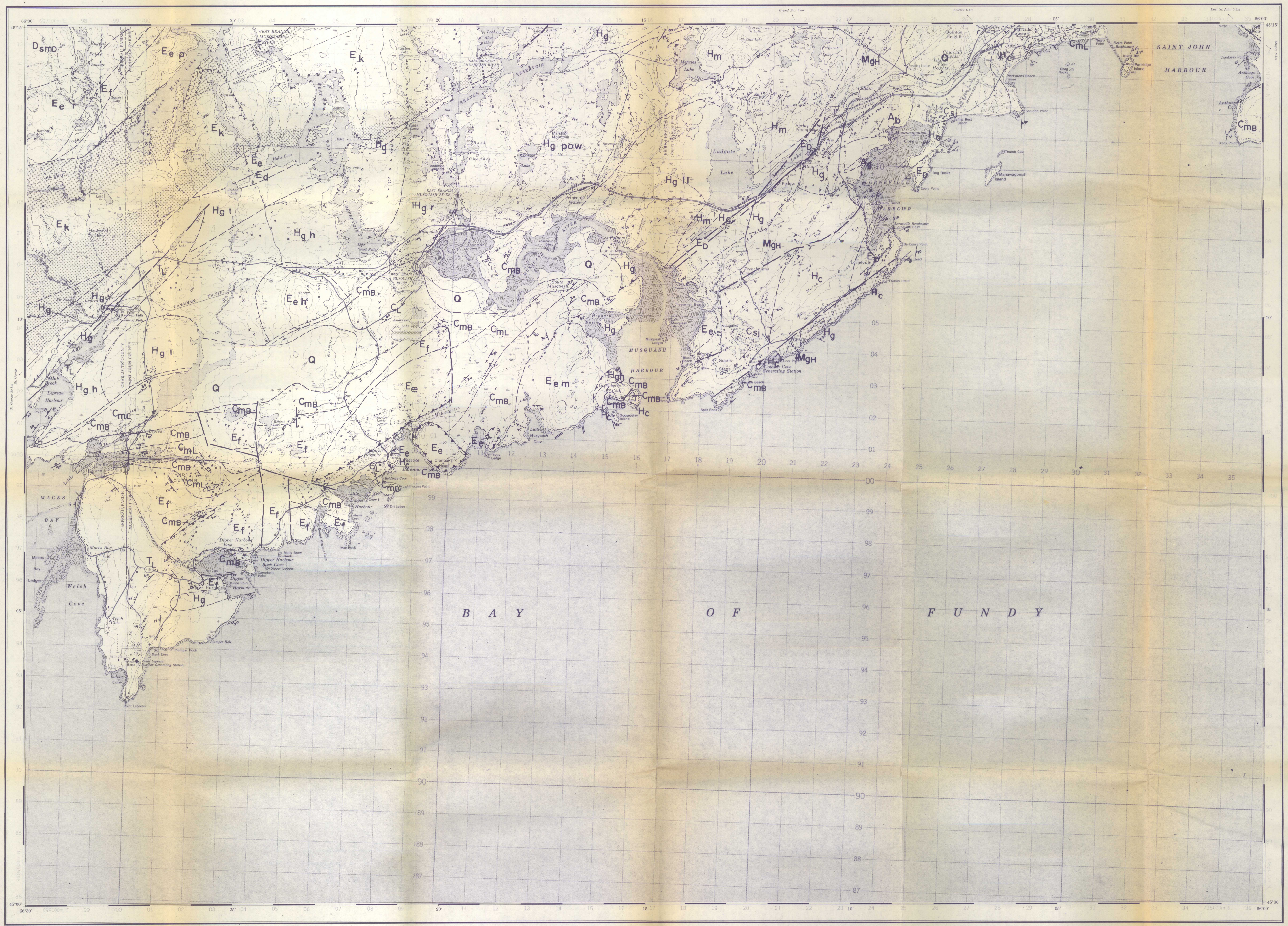

LEGEND FOR THE GEOLOGICAL MAP OF THE SAINT JOHN-SAINT GEORGE REGION

supracrustal units

QUATERNARY

Q — till, boulder clay, moraine; (s) stratified sand and gravel
------ unconformity -----

TRIASSIC

T_L — LEPREAU FM. brown conglomerate, red cross-bedded sand and siltstone
----- unconformity -----

CARBONIFEROUS

C_L — LANCASTER FM. grey lithic arenite, quartz pebble beds, black siltstone; undifferentiated Pennsylvanian clastic strata (MCCOY HD. and TYNEMOUTH CK. FMS)
----- gradational contact -----

C_B — (L) BALLS LAKE FM. red polymiict conglomerate,sandstone,shale, basal caliche and stromatolitic limestone (B) BEAVER HARBOUR FM. green and tan siltstone with conglomerate lenses
----- relations uncertain -----

DEVONIAN AND CARBONIFEROUS

DC_c — red conglomerate and sandstone; basal black siltstone; (P) PERRY FM., (K) KENNEBECASIS FM.
----- unconformity -----

DEVONIAN

D_{sp} — PISKAHEGAN GP; intra- and exo-caldera sequences and caldera fill of the Mount Pleasant caldera
----- relations uncertain -----

SILURIAN AND DEVONIAN

SD_e — undifferentiated clastic sedimentary and bimodal volcanic rocks; includes EASTPORT, FLUME, WAWEIG, DIGDEGUASH FMS.
----- relations uncertain -----

SD_b — BLACKS HARBOUR BEDS;deformed red conglomerate and siltstone;caliche beds. May be equivalent to DC_{cp} in part
----- relations uncertain -----

SILURIAN

MASCARENE GROUP

S_s — thin bedded green to grey siltstone, calcareous fossiliferous siltstone; (jc) Pridolian JONES CREEK FM.
----- gradational contact -----

S_a — amygdaloidal basalt,rhyolite,tuff, calcareous siltstone; mafic dykes and sills; (lr) Llandovery LONG REACH FM.
----- unconformity (on E_s and older) -----

OS_q — QUEEN BROOK FM; grey green and purple lithic and volcanogenic siltstone
----- relations uncertain -----

CAMBRIAN AND LOWER ORDOVICIAN

C_s — (j) SAINT JOHN GP. grey green sandstone and siltstone grading up to black shale; basal granule conglomerate; mafic dykes. (b) BUCKMAN CREEK BEDS. basalt flows and tuff, rhyolite; limy siltstone beds.
-----gradational to disconformable contact-----

EOCAMBRIAN

E_d — red tuff, sandstone, conglomerate with porphyry cobbles; rare basalt flows; includes undifferentiated E_b and E_r
----- conformable contact -----

E_b — vesicular to amygdaloidal basalt with local slaggy flow tops; minor tuff
----- conformable contact -----

E_r — pink to green quartz-feldspar porphyry, rhyolite,ignimbrite;minor siltstone
----- unconformity -----

LATE PROTEROZOIC

H_c — COLDBROOK GP.;basalt, fragmental intermediate volcanic rocks; (s) green laminated siltstone, conglomerate
----- relations uncertain -----

H_m — MARTINON FM.;black turbidite siltstone, basalt sills; marble-bearing debris flow
----- unconformity -----

MIDDLE PROTEROZOIC (?)

M_g — GREEN HEAD GP.;marble, stromatolitic locally, quartzite, minor pelitic schist
----- mobilized unconformity -----

plutonic units

D_S — SAINT GEORGE BATHOLITH;(md) MOUNT DOUGLAS PLUTON, pink rapakivi granite and porphry, aplite dykes (367 Ma); (m) MAGAGUADAVIC PLUTON, seriate pink biotite granite (395 Ma) (lu) LAKE UTOPIA PLUTON; biotite granite with tuffisite veinlets (405 Ma); (b) BOCABEC COMPLEX, gabbro, diorite, granodiorite (408 Ma)
----- intrusive contact -----

S_w — peralkaline granite,syenite,felsite minor syenogabbro; includes JAKE LEE MOUNTAIN and WELSFORD complexes
----- intrusive contact -----

E_a — pyroxene and hornblende gabbro, ultramafics; (DUCK LAKE pluton); diorite (LEPREAU pluton)
----- intrusive contact -----

E_g — red to pink granite and granodiorite with aplitic phases; (m) Musquash; (h) Harvey Hill; (r) Ragged Falls; (p) Rocky Pond; (g) Goose Lake-Pull and Be Damned
----- intrusive contact -----

E_k — KINGSTON COMPLEX;sheeted dykes of basalt, appinite, felsite rhyolite; includes minor H_c, mainly equivalent to E_a + E_g
----- intrusive contact -----

H_g — GOLDEN GROVE SUITE; enclave-rich diorite, granodiorite and granite. (yc) Yankee Cove; (fr) Fairville-Renforth; (rh) Red Head; (p) Prince of Wales; (r) Musquash Reservoir; (h) Hansen Stream; (ll) Ludgate Lake ; (hl) Henderson Lake; (b) Brittain Stream; (ac) Alan Cot; (b) Red Bridge
----- intrusive contact -----

H_d — diorite gneiss, basalt dykes
----- intrusive contact -----

A_b — BROOKVILLE GNEISS;plagioclase-quartz-hornblende +/-biotite gneiss; migmatite; biotite granite gneiss; minor quartzite and paragneiss

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- primary supracrustal structure, facing upright, overturned, unknown
- igneous layering
- trend of dykes
- gneissosity
- cleavage, first, second
- mylonitic layering
- minor fold, movement sense known, unknown
- joints
- mylonite zone
- geological contact,approximate, assumed
- outcrop, area of outcrop
- stretching lineation
- high angle fault, with movement sense
- thrust fault, teeth on thrust block
- major fold with plunge, overturned
- zone of brecciation

Geological information from Currie et al. 1981, Currie 1984,1986,1987,1988; Currie and Nance 1983; McCutcheon and Ruitenberg 1987; Wardle 1977; Tanoli 1987; McLeod and Gardiner 1987

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