TERTIARY AND LATEST CRETACEOUS

T — BANQUEREAU FORMATION (s)
(MAESTRICHTIAN-PLIOCENE)

CRETACEOUS

K — MISSISAUGA, NASKAPI, LOGAN CANYON, DAWSON CANYON, WYANDOT FORMATIONS (s)
(Some formations are present on cross-sections only)

JURASSIC

J — ARGO, IROQUOIS, MOHAWK, ABENAKI, MIC MAC, VERRILL CANYON, MISSISAUGA FORMATIONS (s)
(Some formations are present on cross-sections only)

TRIASSIC

Ŧs — Ŧs2 SCOTS BAY FORMATION (s); Ŧv — Ŧv2 NORTH MOUNTAIN BASALT; Ŧs1 WOLFVILLE, BLOMIDON FORMATIONS (s); gabbro dyke; Ŧv1 McKAY HEAD BASALT

PERMIAN

P — PICTOU GROUP (s)
(Includes undifferentiated Pennsylvanian strata)

CARBONIFEROUS

PENNSYLVANIAN

P — RIVERSDALE, CUMBERLAND, PICTOU, PETITCODIAC, BARACHOIS GROUPS (s)
(Includes undifferentiated Pennsylvanian and Upper Mississippian rocks in western Newfoundland; may include Permian rocks in the central part of the Laurentian Channel)

Pb — gabbro and associated rocks in northern Nova Scotia

MISSISSIPPIAN

M — HORTON, WINDSOR, CANSO, HOPEWELL, MISPEK, ANGUILLE, CODROY GROUPS (s,v)
(Lower part of Horton group is late Devonian in age)

P,J — PENNSYLVANIAN to JURASSIC (s)
(Undifferentiated)

DEVONIAN

D — KNOYDART, TORBROOK, McADAM LAKE, FISSET BROOK FORMATIONS (s,ms,v)

Dg — granite
(May include older granites)

SILURIAN AND DEVONIAN

SD — ARISAIG GROUP and equivalents, KNOYDART FORMATION and equivalents, MIDDLE RIVER GROUP (s, ms, v)

SILURIAN

S — WHITE ROCK, KENTVILLE, NEW CANAAN FORMATIONS, MASCARENE GROUP (s, ms, v)

ORDOVICIAN

O — BROWNS MOUNTAIN GROUP, MALIGNANT COVE, STEWART BROOK FORMATIONS (ms, v)

OSD — Undivided ORDOVICIAN, SILURIAN and DEVONIAN rocks of southwestern Newfoundland (ms, m, v)

CAMBRIAN-ORDOVICIAN

MEGUMA GROUP

COH — HALIFAX FORMATION (ms)

COG — GOLDENVILLE FORMATION (ms)

CD — Undifferentiated MEGUMA GROUP and DEVONIAN granite; includes WHITE ROCK FORMATION south and west of Yarmouth (ms, m, v, g)

CAMBRIAN

Є — MacCODRUM, CANOE BROOK FORMATIONS, BOURINOT, KELVIN GLEN GROUPS, TROUT BROOK, MacMULLIN, MacLEAN BROOK MacNEIL, McLEOD BROOK FORMATIONS, SAINT JOHN GROUP (s, ms, v)
(Includes some Lower Ordovician strata)

PRECAMBRIAN

P€ — GEORGE RIVER, FOURCHU GROUPS, MORRISON RIVER FORMATION, GREEN HEAD, COLDBROOK GROUPS AND RATCLIFFE BROOK, GLEN FALLS FORMATIONS (s, ms, m, v) (In New Brunswick, includes granite of probable later Precambrian-early Paleozoic age)

granite

pP — pre-PENNSYLVANIAN: (Acoustical Basement)
Includes PRECAMBRIAN, CAMBRIAN, and MISSISSIPPIAN sedimentary, metasedimentary, volcanic, and intrusive rocks south of Cape Breton Island; and PRECAMBRIAN to MISSISSIPPIAN sedimentary, metasedimentary, volcanic and intrusive rocks south of New Brunswick and Maine (s, ms, v)
(May locally include some younger sedimentary and volcanic rocks)

Geology onshore

Geology offshore

Letters indicate principal lithology as follows: g.....granite b.....gabbro
s.....sedimentary ms.....metasedimentary m.....metamorphic v.....volcanic

Geological contact (offshore)
- surface (defined, approx., assumed)
- subsurface (defined, approx.)
- cover rock

Zero isopach of Wyandot Formation (approx., assumed)

Fault
- surface (defined, approx.)
- surface (assumed)
- subsurface (defined, approx.)
- subsurface (assumed)

Fold axis
- anticline (approx., apparent)
- syncline (approx., apparent)

Attitude of beds
- (actual, apparent)

Underwater sample locality
- (dredge, shallow diamond-drill hole)

Line of section — A — B

Exploratory well location

Continuous seismic-reflection track
- (Bedford Institute of Oceanography)

Geology of land areas compiled from the following maps and reports:

Alcock, F.J., 1949. Geological Map of the Maritime Provinces; Geol. Sur. Can., Map 910 A.

Cormier, R.F., 1972. Radiometric Ages of Granitic Rocks, Cape Breton Island, N.S.; Can. J. Earth Sci. 9, pp. 1074-1086.

Potter, R.R., Jackson, E.V., Davies, J.L., 1968. Geological Map of New Brunswick; New Brunswick Dept. Natural Resources Map, N.R.-1.

Weeks, L.J., 1965. Geological Map of Nova Scotia; Nova Scotia Dept. Mines.

Williams, H., 1967. Geology-Island of Newfoundland; Geol. Surv. Can., Map 1231 A.

See accompanying report for references pertaining to the offshore geology.

The offshore geology is mainly based on acoustical reflectivity, structural and stratigraphic relationships as interpreted from seismic-reflection data; adjacent shore geology; data from ten exploratory wells, a few dredge samples, and gravity, magnetic, and seismic-refraction data.

GEOLOGY

SCOTIAN SHELF AND ADJACENT AREAS

Geology by Lewis H. King and Brian MacLean
(Bedford Institute of Oceanography), Atlantic Geoscience Centre
Geological Survey of Canada, Department of Energy Mines and Resources

CONTOURS IN METRES

Scale 1:1,000,000

Projection : Lambert Conformal
(Standard Parallels 43°N. and 49°N.)

Scale of Statute Miles

Scale of Kilometres

This map accompanies Marine Sciences Paper Series No. 7, G.S.C. Paper No. 74-31
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