



GEOLOGICAL SURVEY OF CANADA  
COMMISSION GÉOLOGIQUE DU CANADA

### MAP 1826A GEOLOGY CARIBOU MINES NEW BRUNSWICK

Scale 1:20 000 - Échelle 1/20 000  
Universal Transverse Mercator Projection  
Projection horizontale universelle de Mercator  
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- LEGEND**
- The legend is common to all maps in this project area. Not all map units appear on the map. Geological boundaries are in part determined on interpretation of aeromagnetic and available ground magnetic maps.
- Geological units in the legend are probably: most rocks are folded and where rich in phyllosilicates, have been transformed into phylites. Slipping lines in some lighter beds occur basaltic units of different chemical compositions. The stratigraphic and tectonic relationships of the units are reportedly understood because the original stratigraphic succession has in part been obscured by thrusting and folding.
- CARBONIFEROUS**
  - Grey and red conglomerate, sandstone, and shale
- DEVONIAN OR YOUNGER**
  - Diabase dykes
- SILURIAN AND/OR DEVONIAN**
  - Basaltic gneiss and granodiorite (SDg) pink to grey, massive, mainly medium grained, equigranular to locally porphyritic, includes quartz and/or kalsilite porphyry (SDp)
  - Sandstone, shales, minor conglomerate, limestone, and volcanic rocks
- OROVICAN TO DEVONIAN**
  - Green to brown, generally subhorizontal to coarse grained, mainly gabbro (ODb) and mafic gabbro (ODm), probably middle Ordovician or Silurian-Devonian. Some bodies may contain multiple structures of different ages
  - Fine to medium-grained monzonite and granodiorite, probably middle Ordovician or Silurian-Devonian
  - Red to green to brownish green, generally metamorphosed, mafic gabbro (ODm) and mafic gabbro (ODb), may locally include some basalt. The gabbro is glass inclusion ultrabasic and anorthositic phases
  - Foliated to massive, mainly medium grained, equigranular, pink, mafic porphyroblasts, muscovite granite
- MIDDLE OROVICAN**
  - FOURMERE GROUP (ODm - Oe)
    - MELLESTREE FORMATION (ODm) undivided, mainly thick bedded mafic and felsitic white and grey shale, includes lenses of black shale, calcareous conglomerate, siltstone and limestone and calcareous siltstone (Ode), and minor rhyolite (Ode)
    - SORMAWY FORMATION (ODm) basalt, mainly pillowed and massive flows, minor sandstone (ODm), includes calcareous gabbro (Ode) and diabase dykes and sills (ODm). The basalt has been divided into three units on the basis of geochemistry: Murray Brook basalts (OSM), Armstrong Brook tholeiites (OSa), and Lincor basalts (OLm)
  - TETAROUQUE GROUP (O - Oe) (Some formations are partly or completely lacustrine)
    - FOURMERE GROUP (ODm) undivided, mainly unmetamorphosed to very thin bedded grey and black shales interbedded with the grained felsitic sandstone and siltstone, calcareous gabbro, includes lenses of red, green and black felsitic shales and other (Ode), black shales, rare limestone, small pillow and phyllosilicate basalt, and intertongued basic volcanic rocks (ODm) consisting of monzonitic, cordierite, and mafic. The shales have been divided into two units on the basis of geochemistry: Murray Brook basalts (OSM) and Armstrong Brook tholeiites (OSa)
    - CAMPEL BROOK FORMATION (O) undivided, silty volcanic rocks, minor pillow breccia and basaltic pyroclastic rocks. Basalts are typically intercalated with red felsic and/or black shales and mafic siltstone, and are associated with thin basaltic siltstone and mafic siltstone. Basalt has been divided into two units on the basis of geochemistry: Nine Mile tholeiites (OSa) and Camp Brook basalts (OSm)
    - LAT LANDING BROOK FORMATION (O) undivided, silty volcanic rocks, mainly phylite and felsitic phylite shales, siltstone, and shales, with minor quartz and felsitic phylite shales, siltstone, and shales, calcareous conglomerate, and andesite and ash tuff. Includes intercalated massive sandstone lenses and micromylonite (Oe), red shale (Oe), basalt (Oe) and greyish chlorite-rich shale (Oe). Where possible basalts have been divided into two units on the basis of geochemistry: Camp Brook tholeiites (OSm), siltstone and andesite (OSm) with associated dike and gabbro, and Forty Mile tholeiites (Oe) mainly pillowed flows with associated dike and gabbro (Oe)
    - ARDEGUIT FALLS FORMATION (O) undivided, mainly thick to very thin bedded felsic volcanic sandstone and shale, siltstone and intercalated pyroclastic rocks and quartz and felsitic phylite shales, silty and/or dark (Oe), includes intercalated iron-formation and massive sulphide (Oe), red, green and black felsitic-rich shales (Oe) and basaltic shales, silt, and dykes of the Forty Mile tholeiite suite with associated dike and gabbro (Oe)
    - VALLEE LOURDES FORMATION: Calcarenite and calcarenite with minor pebble-grade conglomerate, locally fossiliferous
    - PATRICK BROOK FORMATION: Dark grey to black shale interbedded with thick beds of green to black quartz-rich and/or felsitic sandstone characterized by abundant dark quartz grains, commonly parallel
  - CAMBRIAN AND OROVICAN**
    - UPPER CAMBRIAN and LOWER OROVICAN
    - MEARICH BROOK (EOC-O) KNIGHTS BROOK FORMATION: mainly thin to medium bedded, light greenish grey, quartz-rich sandstone and/or siltstone rhythmically interstratified with thin grey to black shale. Includes lenses of orthoquartzite and rare felsitic sandstone
    - CHAIN OF ROCKS FORMATION: mainly greenish-grey, very fine to light greenish grey, very thin bedded quartz-rich sandstone interstratified with thin lenses of light greenish grey shale and siltstone

**LITHOLOGES**

CG	Conglomerate	cg
P	Fillow lava	P
R	Rhyolite	R
Sa	Sandstone and/or shale	Sa
T	Tachyandrite	T

**MINÉRAUX**

Cu	Copper	Mn	Manganese
Au	Gold	Py	Pyrite (massive or semi-massive)
Pb	Lead	S	Silver
Zn	Zinc	Sz	Sulphide

Geology by C.R. van Staal, with contributions by J.A. de Roo and V. Rogers, and assistance (1965-1971) from C. Beaumont-Smith, A. Brown, L. Hall, J.P. Langford, and E. Tolson.

Additional outcrop data compiled from Fyfe (1972a, b), Hermsdorf (1971), Jones (1961), Renick (1969), Sims (1961), and Skinner (1974).

Digital cartography by the Geological Survey of Canada.

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

Base map assembled by the Geological Survey of Canada from parts of maps 21-09 (1975), 21-010 (1975), published at 1:50 000 scale by the Survey and Mapping Branch. Details were revised by the Geological Survey of Canada.

Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Natural Resources Canada, Ottawa, Ontario, K1A 0G9.

Mean magnetic declination 1994, 21°10' W; decreasing 4.1' annually.

Elevations in feet above mean sea level

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