

Published 1993

LEGEND

- (surficial deposits omitted)
- DEVONIAN OR CARBONIFEROUS (?)**
- 11 GANDER LAKE GRANITE: Massive, megacrystic, coarse-grained, biotite granite; 11a, massive, sparsely muscovitic, medium-grained, biotite granite
- LATE SILURIAN OR EARLY DEVONIAN**
- 10 HUNTS PONDS GRANITE: Foliated, equigranular, muscovite-biotite-garnet granite
- SILURIAN (?)**
- INTRUSIONS IN THE WING POND SHEAR ZONE (Units 8 and 9)
- 8 Generally foliated, equigranular, fine- to medium-grained granite; 8a, muscovite granite, locally garnetiferous; 8b, biotite granite; 8c, muscovite-biotite granite; 8d, hornblende granite
- 9 Locally foliated, medium- to coarse-grained hornblende gabbro
- ORDOVICIAN (Late Arenig - Caradoc)**
- DAVIDSVILLE GROUP**
- 7 WEIR'S POND FORMATION: Fine- to coarse-grained sandstone, polymictic conglomerates, black, locally graphitic shale, and calcareous layers and lenses
- EARLY TO MIDDLE ORDOVICIAN (Late Arenig - Early Llanvirn)**
- GANDER GROUP (Units 3 to 6)**
- 6 INDIAN BAY BIG POND FORMATION (Units 5 and 6)
- 5 East of Gander Lake: Interbedded black pelite, calc-silicate beds, and thin- to medium-bedded, greyish white to dark grey psammite
- 5 West of Wing Pond: 5a, grey to purple, pebble and cobble conglomerate interbedded with grey sandstone; 5b, maroon siltstone
- CAMBRIAN AND EARLY ORDOVICIAN**
- JONATHAN'S POND FORMATION (Units 3 and 4)
- 4 Interbedded graphitic black pelite, dark-grey psammite, and white-weathering quartzite
- 3 Interbedded psammite and greyish-green pelite, minor quartzite and quartz-granule sandstone; includes unseparated felsic and mafic intrusions
- EARLY ORDOVICIAN OR OLDER**
- 2 Undivided mafic and ultramafic rocks east of Gander Lake
- GANDER RIVER COMPLEX**
- 1 Undivided ultramafic rocks, gabbro, plagiogranite, diabase and mafic volcanic rocks; locally subdivided south of Gander Lake: 1a, calc- carbonate rock; 1b, carbonatized and serpenitized pyroxenite; 1c, gabbro

SYMBOLS

- Geological boundary (approximate).....
- Fault (assumed).....
- Topographic lineament indicated by air photograph.....
- Limit of geological mapping described in this report.....
- Bedrock exposure (general, calc-silicate rock, mafic rock, mineralized).....
- Geochronology sample site, with sample number.....
- Bedding, tops known (vertical, horizontal, inclined).....
- Bedding, tops unknown (vertical, horizontal, inclined).....
- Foliation, first deformation (vertical, horizontal, inclined).....
- Foliation, second deformation (vertical, horizontal, inclined).....
- Foliation, third deformation (vertical, horizontal, inclined).....
- High-strain foliation, age unspecified (vertical, inclined).....
- High-strain foliation, relatively intense, age unspecified (vertical, inclined).....
- High strain zone.....
- Axis of minor fold (second, third deformation, age unknown).....
- Lamination (second, third deformation; c = crenulation lineation).....
- Igneous primary flow structure.....

METAMORPHIC MINERAL ASSEMBLAGES

Pelitic rocks (+)		Calc-silicate (+) and mafic rocks (x)	
actinolite	Act	actinolite	Act
albite	Ab	albite	Ab
biotite	Bt	biotite	Bt
chlorite	Ch	chlorite	Ch
epidote	Epi	epidote	Epi
hornblende	H	hornblende	H
hornblende (blue-green)	Bh	hornblende (blue-green)	Bh
prehnite	Pr	prehnite	Pr
titanite	Ti	titanite	Ti

METAMORPHIC ISOGRADS, DEFINED IN PELITIC ROCKS

- (symbol on upgrade side)
- Biotite.....
- Garnet.....
- Andalusite.....
- Cordierite.....
- Sillimanite.....

MINERAL OR COMMODITY OCCURRENCE OF ECONOMIC SIGNIFICANCE

chromite	cr	copper (ppm)	Cu
pyrite	pyr	molybdenum (ppm)	Mo
dimension stone or bedrock aggregate	stm	lead (percent)	Pb
silver (ppm)	Ag	antimony (ppm)	Sb
arsenic (ppm)	As	tungsten (ppm)	W
gold (ppb)	Au		

Assay result, in units indicated above, and sample number. 34(Au) 99-217

National Mineral Inventory Number System (MDDS)..... 002d15cr 001

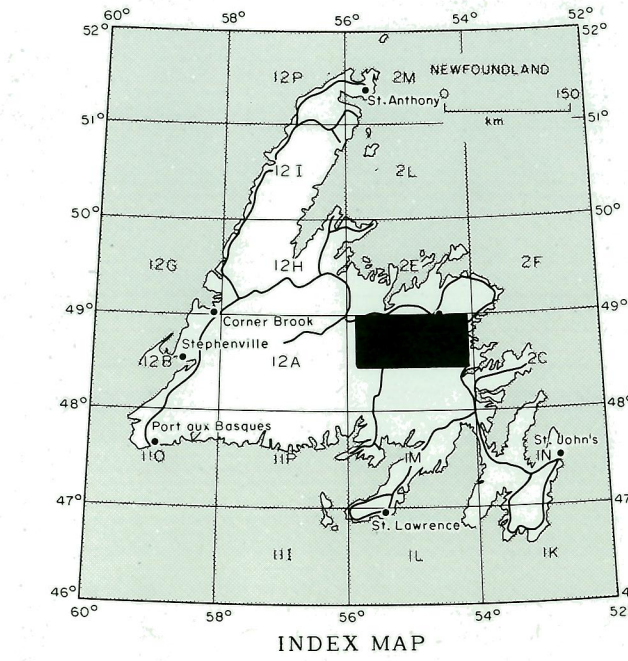
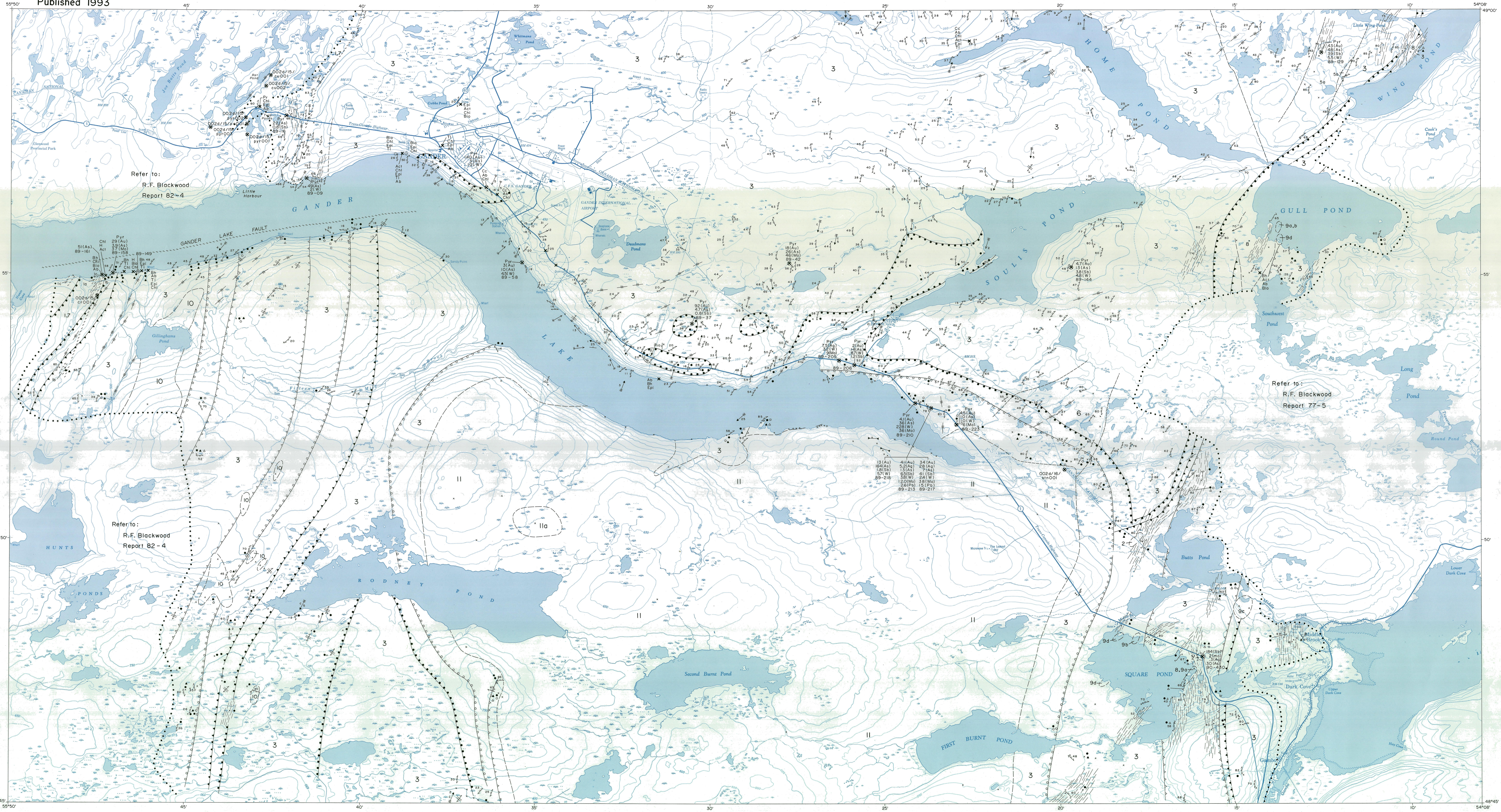
Geological mapping by P. P. O'Neill (1989 and 1990). Copies of this map may be obtained from the Publications and Information Section, Geological Survey Branch, Department of Mines and Energy, P.O. Box 8700, St. John's, Newfoundland, Canada, A1B 4X6.

Base maps at the same scale published by the Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa, 1971.

Elevations in feet above mean sea level.

Approximate magnetic declination, 1986, 25° 03' west, decreasing 8.6' annually.

Geological cartography by Cartographic Section, Geological Survey Branch, Department of Mines and Energy, Government of Newfoundland and Labrador.

MAP 93 - 15
GEOLOGY OF THE EASTERN GANDER (NTS 2D/15)
AND WESTERN GAMBO (NTS 2D/16) MAP AREAS,
NEWFOUNDLAND

