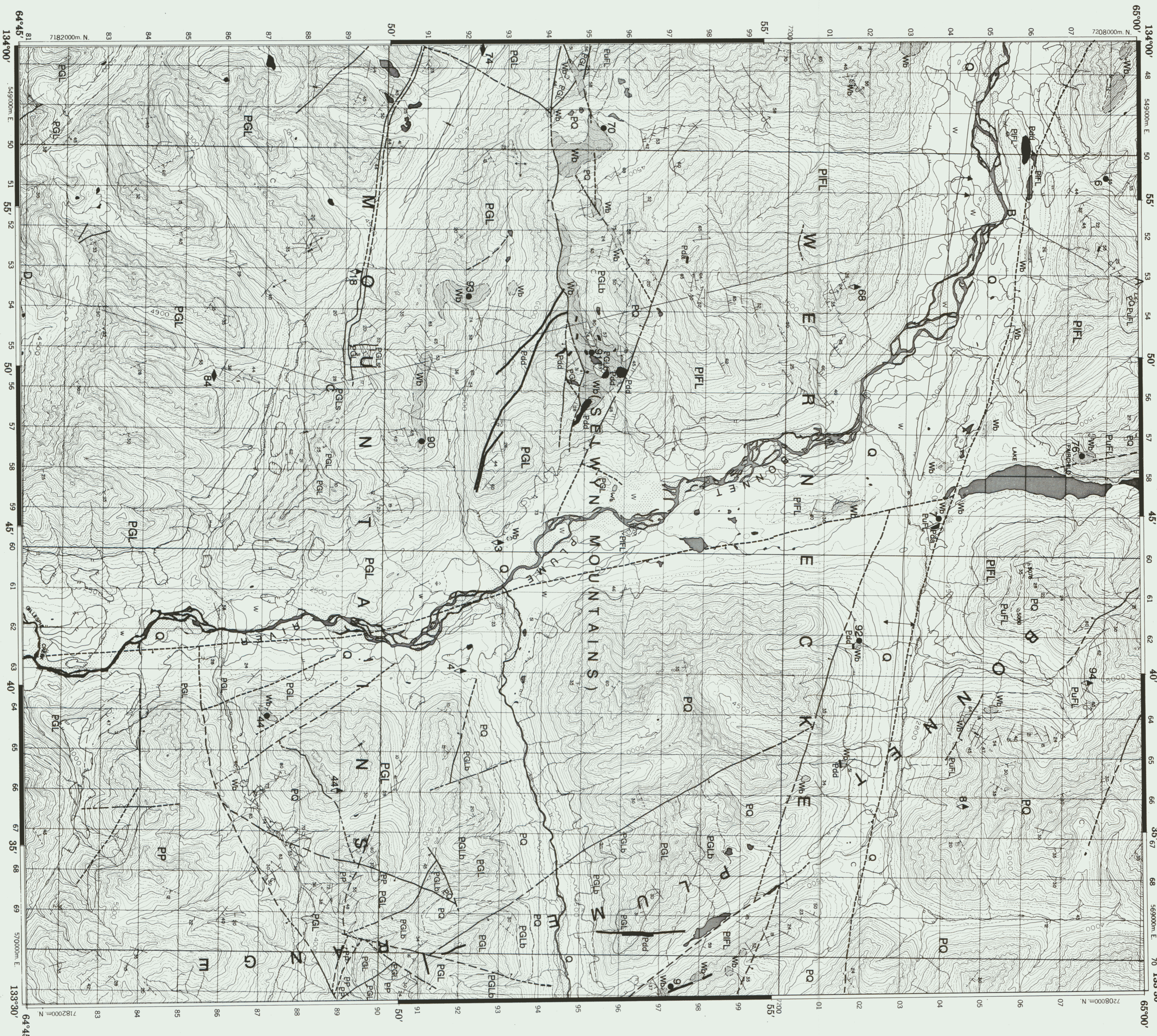


Canada



Yukon

EDITION 1 106 C/13
Government of Yukon



PRODUCTION BY: GEORGE WALKER, MAJOR, METROPOLITAN REGIONAL OFFICE, YUKON TERRITORY
© CANADA CORONATION REPRODUCED 1973

CONTROLLED BY: GEORGE WALKER, MAJOR, METROPOLITAN REGIONAL OFFICE, YUKON TERRITORY
© CANADA CORONATION REPRODUCED 1973

MAP OF THE TERRITORY OF YUKON
NORTH AMERICAN DATUM 1983

Scale 1:50,000 Feet
Scale 1:150,000 Feet

FAIRCHILD LAKE

YUKON TERRITORY

THIS MAP IS A REVISION OF THE 1968 MAP OF THE FAIRCHILD LAKE AREA, YUKON TERRITORY, AND IS A PART OF THE FAIRCHILD LAKE MAP AREA, YUKON TERRITORY. THE MAP IS A REVISION OF THE 1968 MAP OF THE FAIRCHILD LAKE AREA, YUKON TERRITORY, AND IS A PART OF THE FAIRCHILD LAKE MAP AREA, YUKON TERRITORY.

PRODUCTION: TRANSMISSION DE YUKON

THIS MAP IS A REVISION OF THE 1968 MAP OF THE FAIRCHILD LAKE AREA, YUKON TERRITORY, AND IS A PART OF THE FAIRCHILD LAKE MAP AREA, YUKON TERRITORY. THE MAP IS A REVISION OF THE 1968 MAP OF THE FAIRCHILD LAKE AREA, YUKON TERRITORY, AND IS A PART OF THE FAIRCHILD LAKE MAP AREA, YUKON TERRITORY.

PRODUCTION: TRANSMISSION DE YUKON

106 E/1	106 F/4	106 F/3
106 D/16	106 C/13	106 C/14
106 D/9	106 C/12	106 C/11

106 D/16	106 C/13	106 C/14
106 D/9	106 C/12	106 C/11

LEGEND

STRATIFIED ROCKS

- Quaternary**
 - Q Alluvium, colluvium, and glacial deposits
- Middle to Late Proterozoic**
 - Pinguicula Group**
 - PP Mason and green weathering siltstone, orange and grey weathering dolostone with minor interbeds of maroon to black siltstone, minor basal greenish grey quartzose sandstone with lenses of conglomerate
 - Middle Proterozoic**
 - Gilespie Lake Group**
 - PGL Undivided Gilespie Lake Group: orange, brown and grey weathering dolostone and silty dolostone, locally stromatolitic, locally bedded with subordinate black weathering siltstone and shale, green, grey and brown weathering laminated mudstone and grey to white weathering quartzose sandstone. Locally developed staly cleavage in shaly beds. Hosts sedimentary exhalative Zn, Pb, Cu, and Ag.
 - PGLS Black weathering siltstone and shale
 - PGLB Basal Gilespie Lake Group: cross laminated, orange weathering silty to sandy dolostone interbedded with black weathering shale and grey to white weathering quartzose, fine grained sandstone

INTRUSIVE ROCKS

- PFL** Undivided Fairchild Lake Group: siltstone, fine grained sandstone, laminated limy siltstone, and minor carbonate
- PULF** Upper Fairchild Lake Group: black weathering siltstone, buff to light grey weathering dolomite siltstone, orange to brown weathering dolomite, and greenish grey weathering siltstone and shale, locally developed staly cleavage, grades upward into black shale and siltstone of Quartz Group, and downward into lower Fairchild Lake Group
- PFL** Lower Fairchild Lake Group: Greenish grey to pink and greenish grey weathering fine grained sandstone, and minor brown weathering carbonate. Siltstone and sandstone are commonly cross-laminated; siltstone is locally cleaved, crumpled and kinked; base not exposed

- WB** Metred red, green and grey weathering hematitic and chloritic breccia and related metasedimented country rock. Breccia contains variably metasomatized clasts of Wernecke Supergroup, and minor dyke rock. Breccia and metasediments are locally enriched in copper, cobalt, uranium, silver and gold igneous dykes
- Pd** Fine to medium grained, mafic to intermediate dykes. Pd: greenish grey weathering, fine to medium grained diorite to gabbro. Pd: grey weathering, biotite andesite to basalt, locally sperulitic and amygdaloidal

- Mineral Occurrences, listed in Yukon Minfile**
 - Wernecke breccia
 - Cu and/or Au (Au, Cu, Au, Mo, Ba, Ag)
 - 7 FAIRCHILD
 - 9 BOULCHERS
 - 44 LEARY
 - 70 NORANDA
 - 76 OTTER
 - 91 OLYMPIC
 - 92 WHALE
 - 93 ATHENS

- ONE INDIAN MINE**
- QUADRANGLE DE MILLE METRES**
- WATERFALLS**
- STRATIGRAPHIC OR INTRUSIVE CONTACT**
- Normal or strike-slip fault (lops on downthrown side)**
- Bedding**
- Cleavage**
- Fold**
- Line of cross section**

SYMBOLS

- stratigraphic or intrusive contact
- known, approximate, assumed
- normal or strike-slip fault (lops on downthrown side)
- known, approximate, assumed
- bedding
- inclined, overturned, vertical, horizontal, being unknown, estimate from strike-slip or distant sighting
- cleavage
- inclined, vertical
- fold
- anticline: inclined; overturned
- syncline
- line of cross section

REFERENCES

- BELL, R. T., 1968a. Geological map of northeastern Wernecke Mountains, Yukon Territory. Geological Survey of Canada, Open File 1537.
- BLISSON, S. L., 1974. Geology of Nadelem River, Lansing, Noddy Lake, Bonnef Plume Lake and Mount Eburne map areas, Yukon Territory. Geological Survey of Canada, Open File 205, scale 1:250 000.
- DELANEY, G. D., 1981. The mid-Proterozoic Wernecke Supergroup, Wernecke Mountains, Yukon Territory. In: Proterozoic Basins of Canada, F. H. A. Campbell, (ed.), Geological Survey of Canada Paper 81-10, p.1-23.
- ESBACHER, G. H., 1978. Two major Proterozoic unconformities, Northern Canadian Shield. Current Research, Part A, Geological Survey of Canada, Paper 81-14, p.53-58.
- MAAC, 1983. Yukon MINFILE 1983. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada.
- THORNTON, D. J. and WALLACE, C. A., 1983a. Development of the Wernecke Supergroup in the Fairchild Lake area, Wernecke Mountains, Yukon. In: Yukon Exploration and Geology, 1982. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 77-87.
- THORNTON, D. J. and WALLACE, C. A., 1983b. Geological map of the Fairchild Lake area, Yukon Territory. In: Yukon Exploration and Geology, 1982. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1983-2 (9).
- TOUBROG, J. F., MAZURE, R. J., and CHAN, A. K., 1979. Report of Fairchild Coal Project: Indian and Northern Affairs Canada Assessment Report 8050821.

Acknowledgments

The authors thank Grant Abbott for constructive comments, and Will van Renden for computer drafting.

This map accompanies the following report:

- THORNTON, D. J. and WALLACE, C. A., 1984. Geological setting of mineral occurrences in Fairchild Lake map area (106C/13), Wernecke Mountains, Yukon. In: Yukon Exploration and Geology, 1983. Exploration and Geological Services Division, Indian and Northern Affairs Canada, Open File 1984-6(9).

Recommended citation:
THORNTON, D. J. and WALLACE, C. A., 1984. Geological map of Fairchild Lake map area (106C/13), Wernecke Mountains, Yukon. In: Yukon Exploration and Geology, 1983. Exploration and Geological Services Division, Indian and Northern Affairs Canada, Open File 1984-6(9).

Open File 1994-6(9)
Indian and Northern Affairs Canada
Exploration and Geological Services Division
Yukon Region

Geological Map of Fairchild Lake Map Area (106C/13), Wernecke Mountains, Yukon
1:50 000 scale

Derek J. Thornton and Carol A. Wallace
Canada/Yukon Mineral Development Agreement
Geoscience Office