

STRUCTURAL CROSS-SECTION NORTHERN SELWYN AND MACKENZIE MOUNTAINS

M.P. CECILE AND D.G. COOK, 1981

GEOLOGICAL SURVEY OF CANADA OPEN FILE REPORT 807

Based on published geological maps, stratigraphy and data from: J.D. Aitken (pers. comm., 1981); Aitken and Cook (1974); Blusson (1971); Cecile (1981 and in-progress); Gabrielse, Blusson and Roddick (1973).

OPEN FILE
DOSSIER PUBLIC
807
GEOLOGICAL SURVEY
COMMISSION GEOLOGIQUE
OTTAWA

\$ 6.00

DETACHMENT AND BALANCING

The sub-Py and Hr detachment between lines B to C and F to G respectively were calculated using an excess area method (see J.R. Hassack, 1979, J. Geol. Soc. Lon., 136). Sources of other detachments are: *Little Dal detachment from J.D. Aitken (pers. comm., 1981) and Aitken and Cook (1975).

Areas between reference lines A and B and C and E are the same in unrestored and restored cross-section, and approximately the same between lines C and H.

STRATIGRAPHY

- Q - Quaternary sediments
- K - Cretaceous
- DMS - Devonian to Mississippian clastic rocks
- SDC - Silurian to Devonian carbonate
- CD - Cambrian to Silurian carbonate
- CE - Cambrian evaporite
- CSK - Sekwi Fm., carbonate
- CB - Backbone Ranges Fm., quartzite
- UH - Upper Proterozoic strata, carbonate, sandstone, shale
- HR - Hapitan Gp., argillite, carbonate
- HCC - Coppercap and Redstone River Fms., carbonate, clastic rocks, evaporite
- HLD - Little Dal Fm., carbonate, shale, evaporite
- HK - Katherine Gp. (Figonankweine Fm.), quartzite, shale
- HT - Teesotene Fm. shale, sandstone, carbonate
- HLX - Proterozoic dolomite and unknown strata
- Py - unknown Proterozoic strata (Wernecke Supergroup?)
- CB - Cambrian to Silurian basin facies
- CDs - Cambrian to Devonian argillite, shale, chert
- LCA - Lower Cambrian argillite
- Hcm - Proterozoic - Cambrian argillite

l, m, u - (prefixes) lower, middle, upper

Σ Facies contact

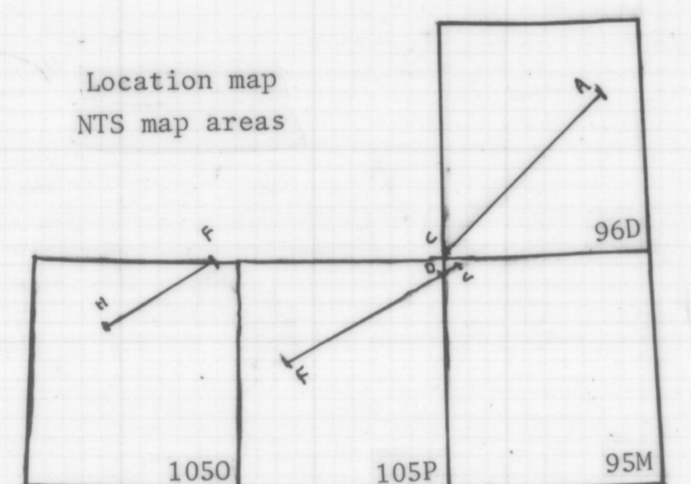
ACKNOWLEDGMENTS

This cross-section was prepared for comparison with an earlier cross-section prepared by S.P. Gorday in the central Mackenzie Mountains. We are indebted to S.P. Gorday and J.D. Aitken for their ideas, suggestions and critical comments.

Portion A-C is adapted from an earlier cross-section by Aitken and Cook (1974) and portion D-F from an earlier cross-section by Blusson (1971).

Typing by I.S.P.C. Word Processing Unit

SCALE
0 10 20
km



CENTRAL SELWYN MOUNTAINS (S.W.)
(63°45'; 131°05')

(64°00'; 130°12') (63°34'; 129°17')

CENTRAL MACKENZIE MOUNTAINS
(63°57'; 128°00')

FRONT - MACKENZIE MOUNTAINS (N.E.)
(64°39'; 126°27')

