83 C/4 EDITION 2 Canadä ÉDITION 2 83 C/4

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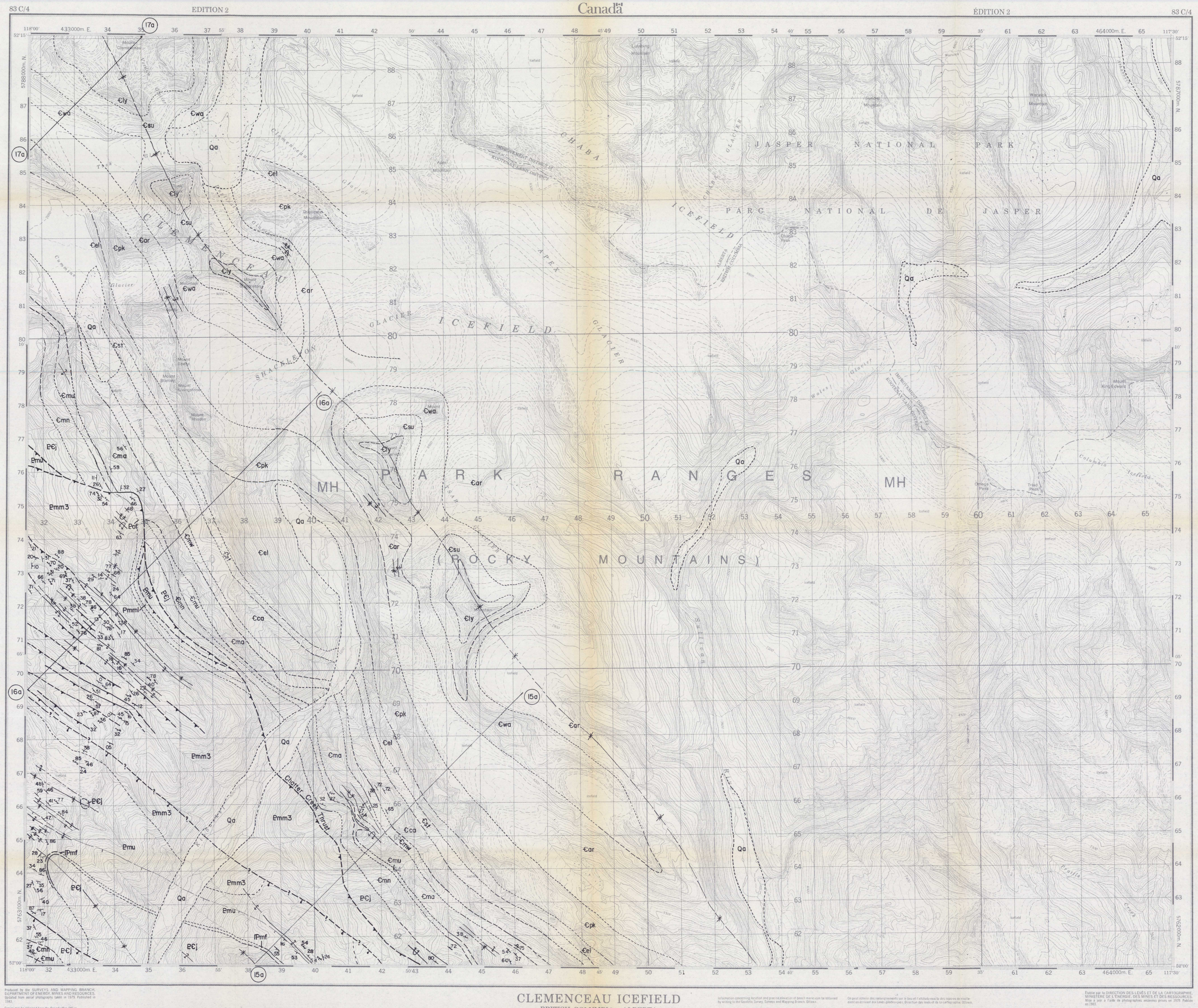

GLOSSARY GLOSSAIRE

ABBREVIATIONS ABRÉVIATIONS

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 11
QUADRILLAGE DE MILLE MÈTRES TRANSVERSE UNIVERSEL DE MERCATOR

CLEMENCEAU ICEFIELD
BRITISH COLUMBIA - ALBERTA

Scale 1:50 000 Échelle

CONVERSION SCALE FOR ELEVATIONS — ÉCHELLE DE CONVERSION DES ALTITUDES

CONTOUR INTERVAL 100 FEET — ÉQUIDISTANCE DES COURBES 100 PIEDS

CLEMENCEAU ICEFIELD 83 C/4 EDITION 2 ÉDITION

Energy, Mines and Resources Canada — Énergie, Mines et Ressources Canada

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LEGEND

QUATERNARY

Qa — Till, alluvium

CAMBRIAN

UPPER CAMBRIAN

€ly — *LYELL FORMATION:* limestone, partly dense, dolomite-mottled, partly dense laminated, locally silty and sandy, mainly massive, dolomitized equivalents

€su — *SULLIVAN FORMATION:* shale, calcareous shale, interbedded with limestone

MIDDLE AND UPPER CAMBRIAN

€wa — *WATERFOWL FORMATION:* limestone with dolomite partings, partly silty and sandy

MIDDLE CAMBRIAN

€ar — *ARCTOMYS FORMATION:* orange-weathering shale, interbedded with dolomitic siltstone and dolomite

€pk — *PIKA FORMATION:* limestone, mainly dense; dolomite and minor shale

€el — *ELDON FORMATION:* limestone, mainly dense, dolomite-mottled, massive; equivalent to Titkana Formation

€st — *STEPHEN FORMATION:* shale with interbedded limestone; equivalent to Tatei Formation (€ta)

€ca — *CATHEDRAL FORMATION:* limestone, mainly dense, dolomite-mottled, massive; equivalent to Chetang Formation (€ct)

€mw — *MOUNT WHYTE FORMATION:* shale, calcareous, with interbedded siltstone and limestone

LOWER CAMBRIAN

GOG GROUP (P€j- €ma)

€ma — *MAHTO FORMATION:* fine grained quartz sandstone and siltstone, plane and ripple cross laminated; minor shale; minor limestone at top

€mu — *MURAL FORMATION:* interbedded calcareous shale and siltstone and minor quartz sandstone; locally limestone at base; overlain by dark green calcareous shale with limestone or dolostone at top

€mn — *McNAUGHTON FORMATION* (above Jasper Member): white quartzite at base, ripple cross laminated; overlain by quartz sandstone and siltstone with minor interbedded shale; capped by quartz sandstone, planar and cross laminated; minor shale.

UPPER PROTEROZOIC AND LOWER CAMBRIAN

GOG GROUP (P€j- €Ma)

P€j — *JASPER MEMBER* (McNaughton Formation): feldspathic quartz sandstone, planar and trough cross laminated; minor red shale and quartz pebble conglomerate (Note 3)

PROTEROZOIC

UPPER PROTEROZOIC

WINDERMERE SUPERGROUP

MIETTE GROUP (Pml- Pmu)

Upper Miette Group:

Pmu — Brown to grey slate and minor sandstone, thinly graded; contains minor carbonate and massive conglomeratic sandstone (grit) near top

Middle Miette Group:

Pmm3 — Massive conglomeratic sandstone (grit); sandstone; interbedded with grey-green to grey slate

Pof — *OLD FORT POINT FORMATION:* bright green to olive green pelite with interbedded siltstone and sandstone; overlain by dolomitic and calcareous siltstone interbedded with limestone; overlain by dark grey to black carbonaceous pelite

Pmm1 — Massive conglomeratic sandstone (grit); sandstone; interbedded with grey-green to grey slate (stratigraphic diagram only)

Lower Miette Group:

Pml — Black and dark grey phyllite, phyllitic schist, minor quartzite and black limestone units (stratigraphic diagram only)

INTRUSIVE ROCKS

PALAEOZOIC?

IPmf — *MAFIC SILLS*

Geological boundary: (defined, approximate, assumed)

Thrust fault: (teeth on hanging wall; defined, approximate, assumed, projection under younger deposits)

Normal fault: (symbols on hanging wall; defined, approximate, assumed, projection under younger deposits)

Proterozoic normal fault: (symbols on hanging wall; defined, approximate, assumed, projection under younger deposits)

Antiform, trace of axial surface: (defined, approximate, projection under younger deposits; upright, overturned)

Synform, trace of axial surface: (defined, approximate, projection under younger deposits; upright, overturned)

Bedding: (inclined, vertical, overturned)

First foliation (S1): (inclined, vertical)

Second foliation (S2): (inclined, vertical)

Mesoscopic F1 fold axis: (inclined, horizontal)

Mesoscopic F2 fold axis: (inclined, horizontal)

Mineral isograds (defined, projection under younger deposits; ticks on high grade side):

biotite

Line of cross-section (15a)

Notes

1. Geology of the Rocky Mountains is from Lickorish (1992)

2. Structural cross section for line 15a is given by Lickorish (in prep). Structural cross sections for lines 16a and 17a are given by Lickorish and McDonough (1992).

3. The Jasper member has been separated out from the McNaughton Formation because it forms a stratigraphically important mappable unit beneath a significant unconformity at the base of the upper McNaughton Formation (Aitken 1969). The name Jasper Formation was used by Charlesworth et al. (1967) to describe these strata in the Jasper area but they are maintained here with the McNaughton Formation to conform with the standard divisions of the Gog Group (Mountjoy 1962). The deposition of the Jasper member is thought to be in fault-bounded basins, producing thick sequences in hanging wall half-grabens, thinning westward, and absent on uplifted footwall blocks (see Structure-sections and stratigraphic diagram) such as in the Lake Louise area (Aitken1969), and in the Solitude Range (Gal1990).

4. The timing of metamorphism in the Rockies is reported to be syn- to post D_2 deformation (Gal 1990).

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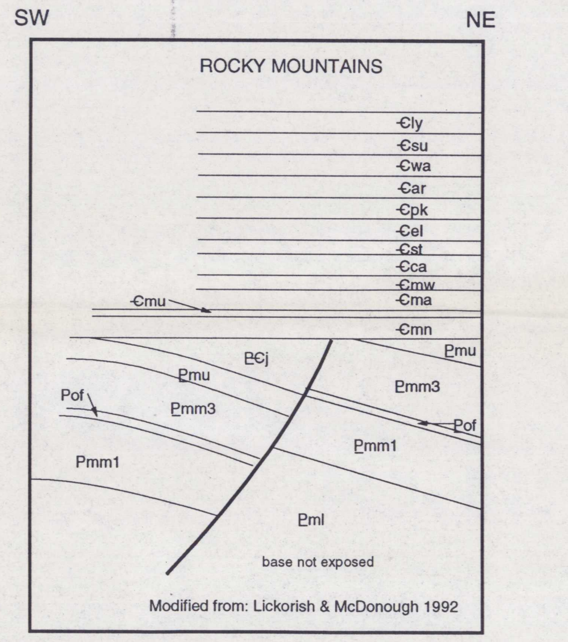
SCHEMATIC STRATIGRAPHIC RELATIONS



Modified from: Lickorish & McDonough 1992

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