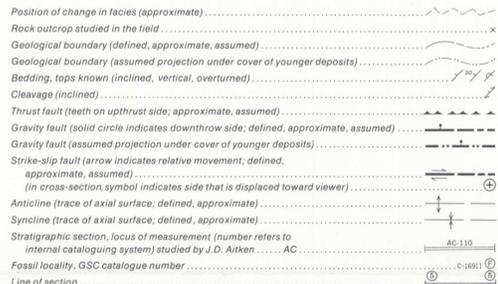




GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

LEGEND

- QUATERNARY**
PLEISTOCENE AND RECENT
- Qsi Snowfields and glaciers (boundaries replotted from vertical air photographs)
 - Qd Till, alluvium, colluvium; gravel, sand, silt (shown only where bedrock is extensively concealed)
- CAMBRIAN**
- UPPER CAMBRIAN**
- Emi **MISTAYA FORMATION:** limestone, partly dense, partly fragmental, with prominent algal stromatolites; dolomitized equivalents; minor chert
 - Ebc **BISON CREEK FORMATION:** shale, greenish grey, interbedded with limestone, mainly fragmental, partly altered to dolomite
 - Ecl **LYELL FORMATION:** limestone, mainly dense, with dolomite partings and mottling, partly laminated, partly silty and sandy; minor fragmental limestone; dolomitized equivalents; minor chert
 - Esuu **SULLIVAN FORMATION:** (Esu)
Upper part: shale, calcareous, brownish grey and greenish grey, interbedded with limestone, mainly fragmental, partly oolitic
 - Esu **Middle part:** limestone, mainly dense, with dolomite partings and mottling, partly laminated, shaly and silty; minor fragmental limestone
 - Esu **Lower part:** shale, calcareous, brownish grey and greenish grey, interbedded with limestone, mainly fragmental, partly oolitic; minor siltstone at base
- MIDDLE AND UPPER CAMBRIAN**
- Ewf **WATERFOWL FORMATION:** limestone, mainly micritic with dolomite partings and mottling, partly silty and sandy; dolomitized equivalents; minor siltstone and sandstone
 - Ecar **MIDDLE CAMBRIAN ARCTOMYS FORMATION:** shale, purple-red, green, and grey; siltstone, grey, yellow, dolomitic, dolomite, micritic, flaggy orange weathering; mud cracks, salt crystal casts
 - Epk **PIKA FORMATION:** limestone, mainly micritic, flaggy with partings of argillaceous dolomite, argillaceous limestone and shale near base; dolomitized equivalents
 - Eel **ELDON FORMATION:** limestone, massive; micritic, grey, dolomite-mottled; dolomitized equivalents
 - Est **STEPHEN FORMATION:** Est, interbedded shale, grey to green, and limestone, partly dense, flaggy with dolomite partings, partly fragmental; Estb, denotes thick "basinal" facies which lies west of the escarpment marking the edge of a carbonate bank comprising the upper part of the Cathedral Formation (McIntyre, 1977)
 - Eca **CATHEDRAL FORMATION:** limestone, massive, micritic, grey, dolomite-mottled; dolomitized equivalents
 - Emw **MOUNT WHYTE FORMATION:** shale, greenish grey; interbedded with siltstone, green to grey, and limestone, mainly fragmental, partly oolitic
- LOWER CAMBRIAN**
- Egg **GOG GROUP:** mainly quartzite and quartzose sandstone, thickly bedded; white, grey, and red; minor thinly interbedded sandstone, siltstone and grey shale
- UPPER PROTEROZOIC (HADRYNIAN)**
- Emi **WINDERMERE SUPERGROUP**
METTE GROUP: slate, grey, dark grey, green and purple; feldspathic gritty sandstone and quartz-pebble conglomerate; quartz sandstone and siltstone
- CAMBRIAN AND ORDOVICIAN**
- UPPER CAMBRIAN AND LOWER ORDOVICIAN**
- Eomk **McKAY GROUP:** slate and shale, grey and green, chloritic and calcareous; grey micritic limestone nodules and interbeds; dolomitized equivalents
- CAMBRIAN**
- UPPER CAMBRIAN**
- Eot **OTTERTAL FORMATION:** limestone, massive, micritic, partly with argillaceous and dolomitic partings and mottling, weathers grey
 - Ecut **CHANCELLOR FORMATION (Upper Transitional Unit):** limestone, medium to dark grey, dense, partly dolomite-mottled and laminated, interbedded with calcareous shales and slate, light greenish grey to light brown
 - Echu **CHANCELLOR FORMATION (Upper part):** slate and calcareous slate, grey, greenish grey and brownish grey, mainly homogeneous with thin interbeds of micritic and partly fragmental limestone in middle part; pervasive cleavage
- MIDDLE AND UPPER CAMBRIAN**
- Echm **CHANCELLOR FORMATION (Middle part):** interbedded cleaved limestone, slate and silty dolomite
 - Echm2 Upper unit: cleaved argillaceous limestone, some shale
 - Echm1 Lower unit: slate with thin beds of silty dolomite
- MIDDLE CAMBRIAN**
- Echl **CHANCELLOR FORMATION (Lower part):** cleaved argillaceous limestone with irregular interbeds of brown and greenish-brown shale and brown argillaceous dolomite

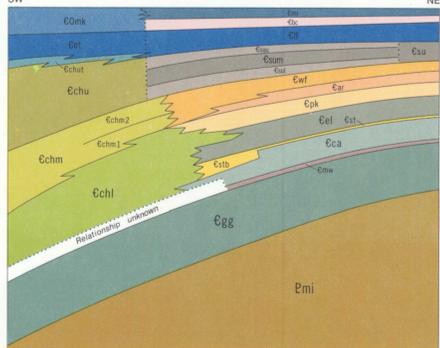


Geology by R.A. Price, D.G. Cook, J.D. Aitken and E.W. Mountjoy based on studies of vertical air photographs and on ground and air observations by J.D. Aitken, H.R. Balkwill, D.G. Cook, E.W. Mountjoy and R.A. Price 1964-67; modified after Cook (1975) and in vicinity of Mounts Stephen, Field, Burgess and Dennis after McIntyre (1977)

REFERENCES

- Cook, D.G.: Geology of the Main Ranges of the Rocky Mountains from Vermilion Pass to Blaeberry River and Bow Lake, British Columbia-Alberta; Geological Survey of Canada, Map 1368A (1975).
- McIntyre, I.H.: Stratigraphic relationships at the western edge of the Middle Cambrian Carbonate facies belt, Field, British Columbia; unpublished Ph.D. thesis, The University of Calgary, Calgary, Alberta (1977).

SCHEMATIC STRATIGRAPHIC RELATIONSHIPS



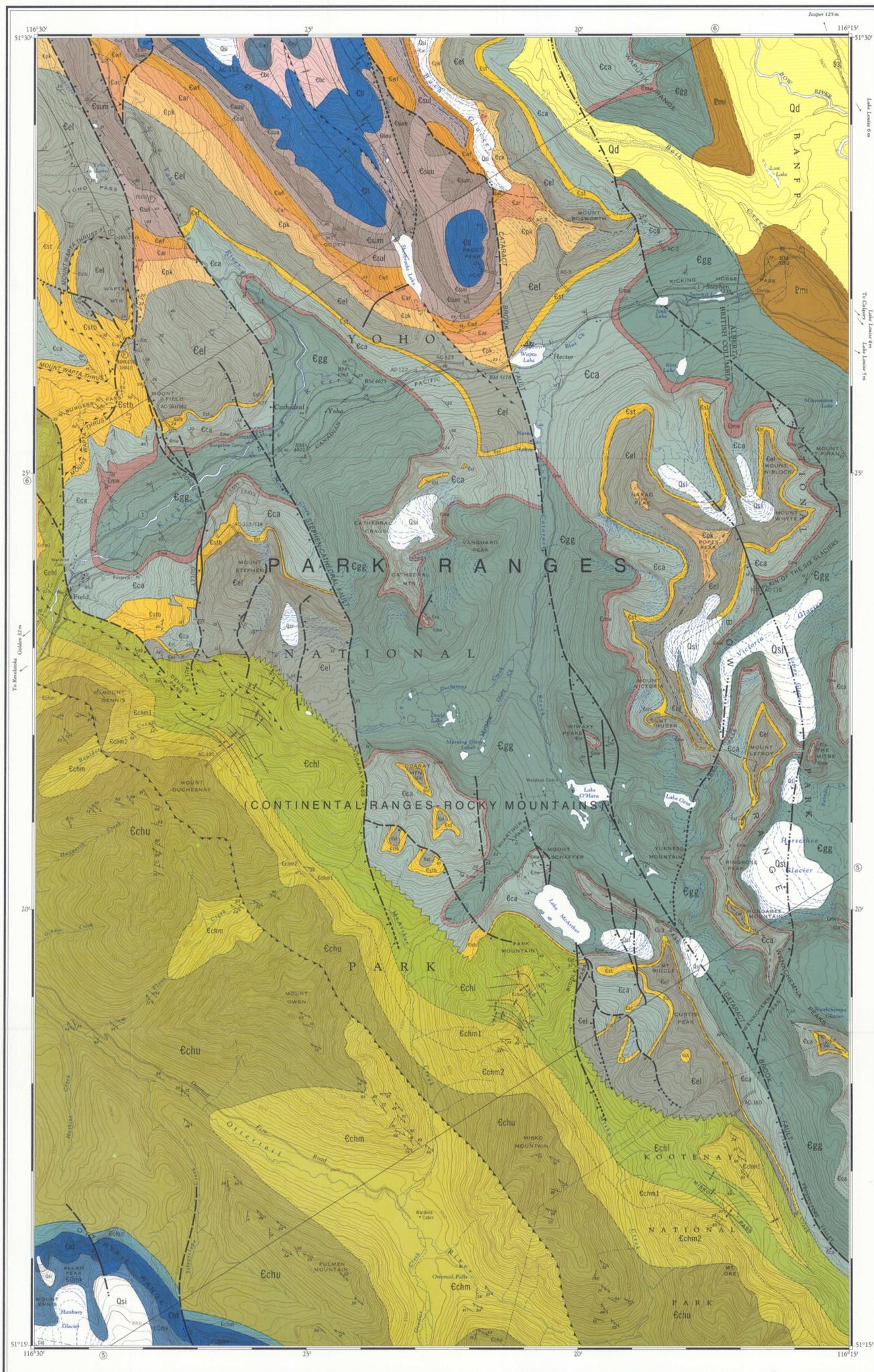
Geological cartography by B.H. Ortman, Institute of Sedimentary and Petroleum Geology, Geological Survey of Canada
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Base map at the same scale published by the Surveys and Mapping Branch in 1972

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Approximate magnetic declination 1979, 22°05.1' East, decreasing 5.3" annually

Elevations in feet above mean sea level



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INDEX MAP

MAP 1483A
GEOLOGY

LAKE LOUISE

(West Half)

WEST OF FIFTH MERIDIAN

BRITISH COLUMBIA-ALBERTA

Scale 1:50,000



Transverse Mercator Projection
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MAP 1483A
LAKE LOUISE
(West Half)
BRITISH COLUMBIA-ALBERTA

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