GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

LEGEND

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

Qd — *Till, alluvium, colluvium*

MESOZOIC

CRETACEOUS
UPPER CRETACEOUS

Kbz — *BRAZEAU FORMATION: greenish grey and grey, feldspathic sandstone and siltstone; rubbly green and grey mudstone; local pebble conglomerate; minor coal and bentonite*

ALBERTA GROUP

Kwp — *WAPIABI FORMATION: silty, dark grey shale and mudstone, typically platy, locally calcareous or concretionary; laminated siltstone; medium to dark grey, argillaceous siltstone and sandstone; minor pebble layers and bentonite seams*

Kcr — *CARDIUM FORMATION: very fine to fine grained, grey sandstone; grey to dark grey siltstone and argillaceous siltstone; dark grey shale (locally concretionary); minor pebble layers and conglomerate lenses*

Kbk — *BLACKSTONE FORMATION: dark grey shale, including silty shale, calcareous shale and concretionary shale; grey to dark grey siltstone; minor sandstone, bentonite seams and pebble layers*

LOWER CRETACEOUS
BLAIRMORE GROUP

Kbm — *BEAVER MINES FORMATION: massive, coarse grained, greenish grey sandstone, siltstone and rubbly mudstone; minor grey and black shale; minor reddish grey mudstone; minor conglomerate*

Klbl — *LOWER BLAIRMORE: grey siltstone and sandstone, commonly calcareous and thin bedded; grey and black shale; grey limestone; minor coal seams. Includes light yellowish grey sandstone and minor pebbly sandstone of the Cadomin Formation at the base*

JURASSIC AND (?) CRETACEOUS

JKk — *KOOTENAY FORMATION: grey and black, commonly carbonaceous and limonitic sandstone; grey and black siltstone; black, carbonaceous shale; minor coal*

JURASSIC
FERNIE GROUP

Jf — *Dark grey to black shale; dark grey siltstone and sandstone; dark grey, platy, silty, argillaceous limestone; brown, limonitic, quartz sandstone*

TRIASSIC
SPRAY RIVER GROUP (Tsm-Twh)

Twh — *WHITEHORSE FORMATION: light grey, dolomitic siltstone and sandstone; red, green, and brown mudstone and siltstone; limestone and dolomite breccia*

Tsm — *SULPHUR MOUNTAIN FORMATION: dark grey and brown, thin-bedded siltstone, silty mudstone, shale, and dolomitic siltstone*

PALEOZOIC

PERMIAN AND PENNSYLVANIAN
ROCKY MOUNTAIN GROUP

PPrm — *Light grey quartz sandstone, dolomitic sandstone, silty dolomite; chert*

MISSISSIPPIAN
RUNDLE GROUP (Mlv-Met)

Met — *ETHERINGTON FORMATION: light grey limestone, cherty limestone, and calcarenitic limestone; dolomite; cherty dolomite; green and red shale; siltstone; breccia*

Mmh — *MOUNT HEAD FORMATION: dense dark grey limestone and argillaceous dolomite; grey limestone and calcarenitic limestone; cherty and silty dolomite and limestone*

Mtv — *TURNER VALLEY FORMATION: light grey skeletal calcarenite and calcarenitic limestone; cherty limestone; dolomite*

Msh — *SHUNDA FORMATION: light to dark grey dense limestone, calcarenitic limestone, and cherty limestone*

Mpk — *PEKISKO FORMATION: light grey skeletal calcarenite, calcarenitic limestone, cherty limestone, and dolomite*

Mlv — *LIVINGSTONE FORMATION: light grey skeletal calcarenite and calcarenitic limestone; cherty limestone; dolomite*

Mbfu — *Upper part: dark grey, cherty, argillaceous and dolomitic limestone and calcarenitic limestone, and brownish grey argillaceous dolomite*

Mbfm — *Middle part: light to dark grey skeletal calcarenite, calcarenitic limestone, and argillaceous and dolomitic limestone*

Mbfl — *Lower part: dark grey and brownish grey shale and calcareous shale; brown argillaceous siltstone; argillaceous and cherty limestone*

Mbf — *EXSHAW AND BANFF FORMATIONS: dark grey, finely crystalline, thin-bedded limestone; dark brownish grey shale and calcareous shale; brown argillaceous siltstone, argillaceous and cherty skeletal calcarenitic limestone, and argillaceous dolomite*

DEVONIAN
UPPER DEVONIAN

Dpa — *PALLISER FORMATION: thickly bedded and massive, mottled dolomitic limestone; grey dense limestone; greyish brown dolomite*

Dax — *ALEXO FORMATION: thinly bedded silty dolomite, dolimitic sandstone, light grey dolomite, and breccia*

FAIRHOLME GROUP (Dcn-Dsx)

Dsx — *SOUTHESK FORMATION: massive to thickly bedded, light to medium grey, finely to coarsely crystalline dolomite; greyish brown finely to coarsely crystalline dolomite*

Dcn — *CAIRN FORMATION: massive to thickly bedded, dark brownish grey and grey, medium crystalline dolomite with Amphipora and stromatoporoid beds; dark grey limestone, dolomitic limestone and dolomite in the lower part; minor chert and breccia; includes channel-filling red beds (Yahatinda Formation) locally at base*

CAMBRIAN
UPPER CAMBRIAN
LYNX GROUP

Ꞓlxu — *UPPER DIVISION: dolomite, mainly grey, locally tinged or speckled with pink, very finely crystalline, grading to dolomitic siltstone, laminated, thickly bedded to massive*

Ꞓsu — *SULLIVAN FORMATION: interbedded grey silty dolomitic shale and grey to brown silty dolomite, grading to dolomitic siltstone*

MIDDLE AND UPPER CAMBRIAN
LYNX GROUP (Ꞓwf-Ꞓlxu)

Ꞓlx — *(undivided)*

MIDDLE AND UPPER CAMBRIAN

Ꞓwf — *WATERFOWL FORMATION: grey to pink very fine to micro-crystalline silty dolomite, dolomitic siltstone, chert nodules*

MIDDLE CAMBRIAN

Ꞓar — *ARCTOMYS FORMATION: thinly interbedded; purple-red, green, and grey shale; yellow dolomitic siltstone with ripple marks, mud cracks, and salt casts; and minor yellow-weathering dolomite*

Ꞓpk — *PIKA FORMATION: grey, dense, thin-bedded, flaggy limestone with partings and mottling of dense dolomite; limestone pebble conglomerate; oolite; dolomitized equivalents; minor shale intervals near the base*

Ꞓel — *ELDON FORMATION: dense, predominantly grey, dolomite-mottled, massive limestone; dolomitized equivalent*

Ꞓst — *STEPHEN FORMATION: interbedded grey to green shale and limestone, partly dense, partly fragmental, minor oolitic; minor siltstone*

Ꞓca — *CATHEDRAL FORMATION: limestone, predominantly dense, dolomite-mottled, massive; dolomitized equivalent*

Ꞓmw — *MOUNT WHYTE FORMATION: interbedded grey to green shale and grey dense thin-bedded limestone with dolomite partings and mottlings. As mapped, locally includes interbedded shale and glauconitic sandstone (Gog Group) at base*

MIDDLE (?) AND LOWER CAMBRIAN
GOG GROUP

Ꞓgg — *Quartz sandstone; siltstone; shale (occurs in structure sections only)*

Note A: undifferentiated Cathedral, Stephen, Eldon, and Pika Formations in imbricate fault slices

Geological boundary (defined, approximate, assumed)
Bedding, tops known (inclined, overturned)
Bedding, tops unknown (inclined, vertical)
Fault, genetic type unknown (approximate, assumed)
Thrust fault (teeth on upthrust side; defined, approximate, assumed)
Anticline (trace of axial plane, defined, approximate)
Syncline (trace of axial plane, defined, approximate)
Anticline, syncline (overturned)
Fossil locality F2
Stratigraphic section, locus of measurement (number refers to internal cataloguing system) studied by: J.D. Aitken .....AC R.W. Macqueen .....MQ MQ-5

INDEX TO FOSSIL LOCALITIES BY GSC CATALOGUE NUMBER

F1 58857
F2 ..... 60995-62036, 62057-62091
F3 52570

Geology in mountains southwest of McConnell thrust by R.A. Price and E.W. Mountjoy based on studies of vertical air photographs (1964-1967), ground and air observations by J.D. Aitken, D.G. Cook, E.W. Mountjoy and R.A. Price (1964-1966) and published geological maps

Geology in Foothills northeast of McConnell thrust by N.C. Ollerenshaw based on detailed ground observations and studies of vertical air photographs by N.C. Ollerenshaw (1963-1966)

Geological compilation by R.A. Price and N.C. Ollerenshaw

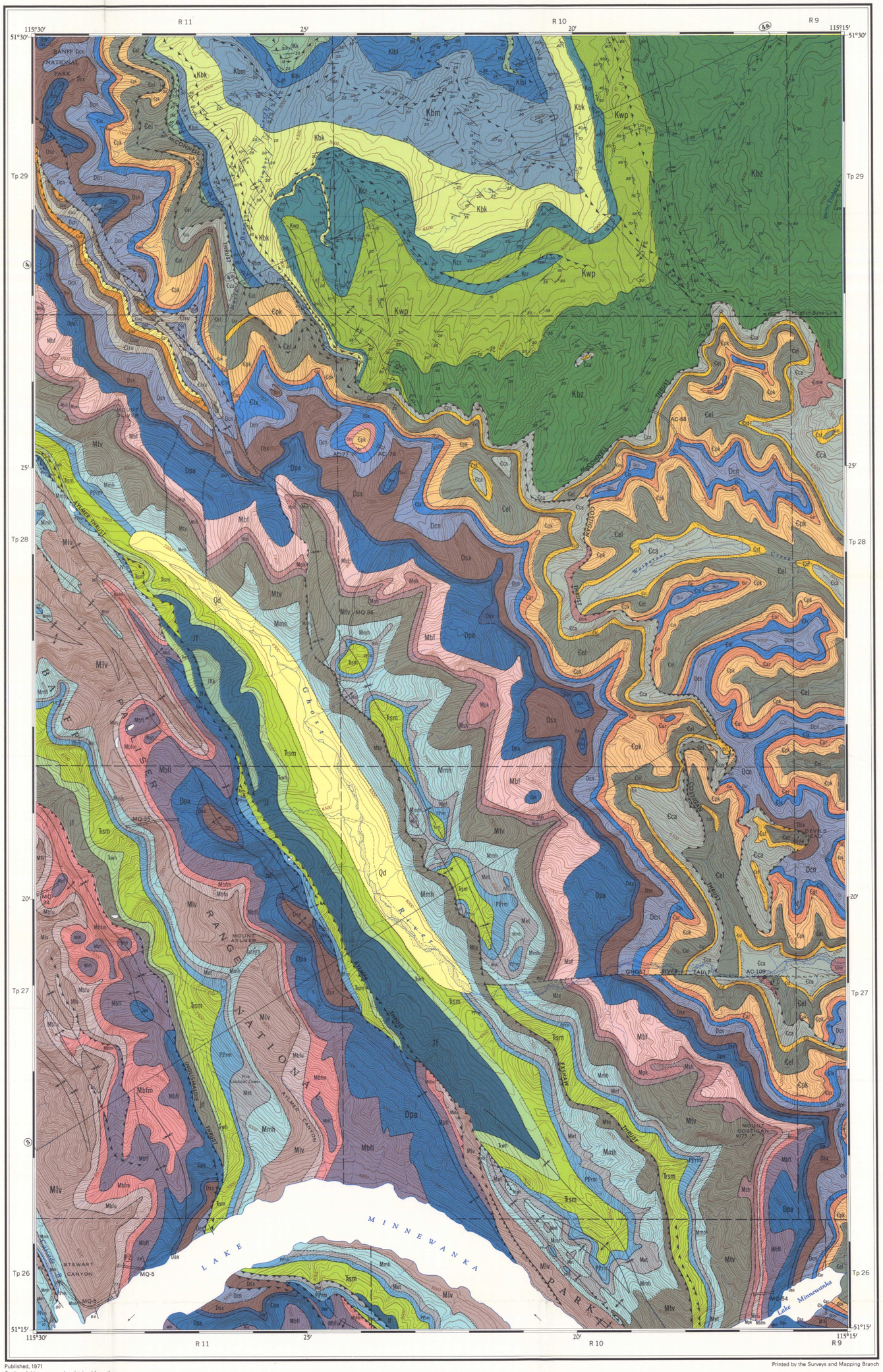
Geological cartography by the Geological Survey of Canada

Base-map at the same scale published by the Surveys and Mapping Branch in 1958

Copies of the topographical edition of this map may be obtained from the Map Distribution Office, Department of Energy, Mines and Resources, Ottawa

Approximate magnetic declination 1969, 22°15' East decreasing 3.5' annually

Elevations in feet above mean sea-level



Published, 1971
Copies of this map may be obtained from the Geological Survey of Canada, Ottawa

Printed by the Surveys and Mapping Branch

INDEX MAP

MAP 1272A

GEOLOGY

LAKE MINNEWANKA

(WEST HALF)

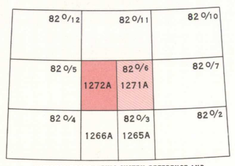
WEST OF FIFTH MERIDIAN

ALBERTA

Scale 1:50,000

Miles 1 0 1 2 Miles

Metres 1000 0 1000 2000 3000 Metres



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO GEOLOGICAL SURVEY OF CANADA MAPS