GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF MINES AND TECHNICAL SURVEYS

PRELIMINARY SERIES

82 M E

LEGEND

SELKIRK AND MONASHEE MOUNTAINS

CENOZOIC

PLEISTOCENE AND RECENT

10 Glacial drift, silt, alluvium; areas of little or no outcrops; 10a, alpine moraine; 10b, landslide or slump

PALAEOZOIC AND/OR MESOZOIC

POST LOWER CAMBRIAN

9 Granitic rocks, undivided; 9a, biotite quartz monzonite; 9b, porphyritic biotite–hornblende quartz monzonite; 9c, mainly hornblende granodiorite

8 Nepheline syenite–gneiss

PALAEOZOIC

CAMBRIAN AND LATER
LOWER CAMBRIAN AND LATER

5 LARDEAU GROUP
Dark grey and black carbonaceous siliceous slate, phyllitic siltstone, and quartzite; dark grey limy slate, rusty weathering buff slate; dark grey and rusty siliceous phyllonite and quartz muscovite–chlorite–plagioclase schist; light and dark grey limestone; greenstone and chlorite schist; 5a, crystalline schist and gneiss

CAMBRIAN
LOWER CAMBRIAN

4 BADSHOT FORMATION: light grey and dark grey limestone, buff and grey dolomite, silvery brown phyllite, grey and white quartzite; 4a, marble, amphibolite, calc–silicate rocks

2 HAMILL GROUP
Pale brown, grey, pale green quartzite; rusty brown, grey, and green slate and phyllite, minor buff- and brown-weathering limestone; 2a, feldspathic micaceous quartzite, quartz–mica schist, amphibolite; 2b, greenstone, locally amygdaloidal, greenstone–breccia

PROTEROZOIC

WINDERMERE

1 HORSETHIEF CREEK GROUP
Grey, buff, brown, and green slate; phyllitic feldspathic quartzite; quartz-sericite schist; 1a, grey, silvery brown and golden brown quartz–mica schist, mica schist, micaceous quartzite, speckled quartz–feldspar–biotite–gneiss, amphibolite, calc–silicate rocks, pegmatite (schists commonly contain garnet, kyanite, and sillimanite); 1b, marble, limestone; 1c, limy beds; 1d, amphibolite

SHUSWAP METAMORPHIC COMPLEX

H Ha, dunite; hb, biotite–hornblende pyroxenite

G Quartz–mica schist, micaceous quartzite, graphitic quartz–sericite schist, andalusite schist, minor aplite and pegmatite (may be part of Mount Ida Group)

F Granitic gneiss and abundant pegmatite, paragneiss; Fa, quartz–feldspar–biotite paragneiss, quartzite, marble calc–silicate rocks; Fb, migmatite complex composed of quartz–feldspar–biotite paragneiss containing sillimanite, lineated leucogranite, aplite, pegmatite; foliated hornblende–biotite granodiorite, granite–gneiss, amphibolite, calc–silicate rocks, nebulitic gneiss and agmatite; Fc, marble

E Da Quartz–biotite–feldspar paragneiss (commonly containing garnet and sillimanite), micaceous quartzite, amphibolite, calc–silicate rocks, all abundantly laced with pegmatite; Ea, marble, calc–silicate rocks

D Da Quartz–biotite–feldspar schist and paragneiss (commonly containing garnet, kyanite, and sillimanite), amphibolite, hornblendic gneiss, quartzite, marble, calc–silicate rocks; minor pegmatite; Da, marble; Db, quartzite

C Swirled gneissic granite; minor biotitic amphibolite

B More or less homogeneous biotite > hornblende granite–gneiss, locally garnetiferous, commonly veined; minor streaky gneiss

A Mixed gneiss varying in composition from foliated leucogranite, locally pegmatitic, through biotite > hornblende granite- and granodiorite–gneiss, to quartz diorite–gneiss and amphibolite and variously occurring as banded gneiss, streaky gneiss, veined gneiss, wavy and folded gneiss

Glacier Gl
Limestone, marble in thin beds
Geological boundary (defined, approximate or assumed)
Bedding, tops known (horizontal, inclined, vertical, overturned)
Bedding, tops unknown (inclined, vertical)
Schistosity, cleavage, gneissosity (horizontal, inclined, vertical)
Lineation (horizontal, inclined, vertical)
Fault (defined, approximate or assumed)
Anticline (defined, approximate)
Syncline (defined, approximate)
Anticline and syncline (overturned, arrow indicates direction of plunge)
Isograds
Mineral property 5×
Placer property 20×

ROCKY MOUNTAINS

CENOZOIC

PLEISTOCENE AND RECENT

10 Glacial drift, silt, alluvium; areas of little or no outcrops

PALAEOZOIC

CAMBRIAN
MIDDLE CAMBRIAN

7 CHANCELLOR FORMATION: thin–bedded grey and greyish brown limestone and argillaceous limestone, micaceous limestone

MIDDLE (?) CAMBRIAN

6 CANYON CREEK FORMATION: grey and black argillite and slate

LOWER CAMBRIAN

3 Grey and brownish quartzite, sericitic slate

MINERAL PROPERTIES

Lead–zinc
1. Kinbasket
2. Ruddock Creek
3. Cottonbelt
4. River Jordan
5. Mastodon
6. Lead King
7. Little Slide
8. J and L
9. A and E
10. Keystone

Copper
11. Montgomery
12. Standard

Gold
13. Stanmack (Ole Bull)
14. Roseberry

Molybdenum
15. Sterling
16. Hard Pan

Asbestos
17. Monarch

Placer
18. West Columbia
19. McCulloch Creek
20. Graham Creek

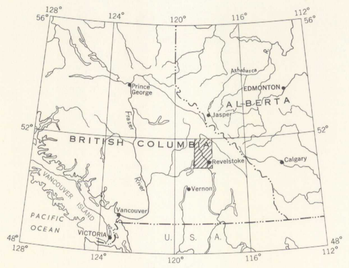
Geology by J. O. Wheeler, 1962 and 1963
Geology of Adamant batholith by P. E. Fox, 1962

Geological cartography by the Geological Survey of Canada, 1964

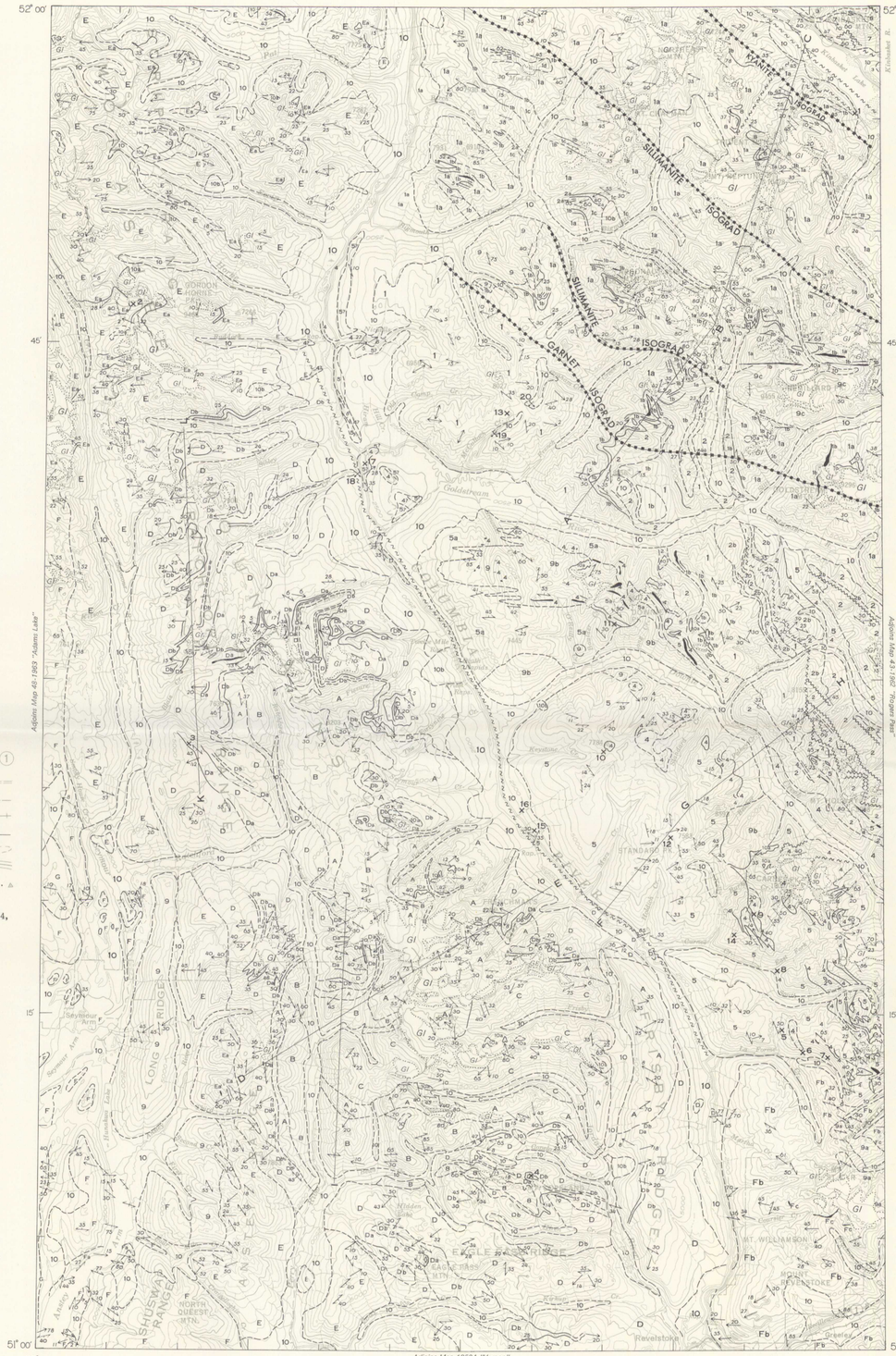
Roads, all weather
Other roads
Trail
Railway
District boundary
Intermittent river and lake
Contours (interval 500 feet)
Horizontal control point

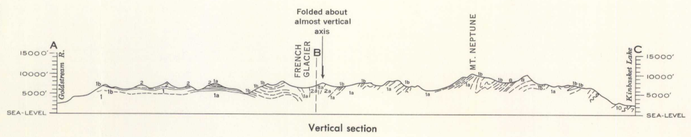
Base–map compiled and drawn by the Surveys and Mapping Branch, 1964, names added by the Geological Survey of Canada

Mean magnetic declination 23° 32' East decreasing 3.3' annually. Readings vary from 23° 00' in the SE corner to 24° 00' in the NW corner of the map–area



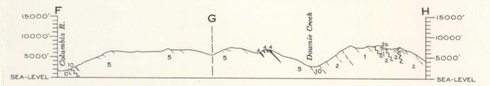
INDEX MAP



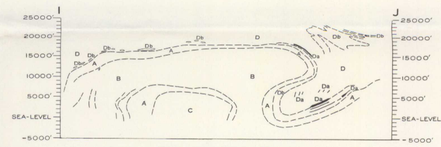


Vertical section

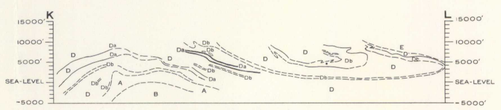
Vertical section



Vertical section



Right section dipping 50° east



Right section dipping 60° east

Sections along lines A-B-C, D-E, F-G-H, I-J, and K-L

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MAP 12-1964
PAPER 64-32

GEOLOGY

BIG BEND
(SEYMOUR ARM, EAST HALF)

BRITISH COLUMBIA

Scale 1:253,440
1 inch to 4 miles

Miles 4 0 4 8 12 Miles
Kilometres 6 0 6 12 18 Kilometres