



QUATERNARY
14 Alluvium, sand, gravel, till

TERTIARY
13 Volcanic breccia

JURASSIC (?) AND/OR YOUNGER
12 Quartz monzonite; minor granodiorite
11 Granodiorite; minor quartz diorite and quartz monzonite; 11a, poorly foliated or massive; 11b, well foliated and/or gneissic

10 Quartz diorite; minor diorite; 10a, poorly foliated or massive; 10b, well foliated and/or gneissic; 10c, complex of heterogeneous quartz diorite and dioritized metavolcanic rocks

9 Diorite; minor quartz diorite; 9a, poorly foliated or massive; 9b, well foliated and/or gneissic

8 Gneissic diorite, diorite, amphibolite, augen gneiss; minor hornblende and biotite gneiss

7 Gabbro, norite, diorite; 7a, gabbro, diorite, amphibolite

JURASSIC AND CRETACEOUS
UPPER JURASSIC AND LOWER CRETACEOUS
BOWSER GROUP
6 Greywacke and argillite

MIDDLE JURASSIC (?) OR OLDER
5 Metavolcanic rocks: greenstone, conglomerate, layered volcanic fragmental rocks, and intercalated greenstone and limestone

LOWER JURASSIC (?) OR OLDER
4 Metavolcanic rocks: greenstone, tuff, agglomerate; minor rhyolite, dacite, limestone, and greywacke; 4a, metadacite; 4b, hornblende schist and greenstone mixed with heterogeneous diorite, quartz diorite, granodiorite, and partly dioritized metavolcanic rocks; 4c, greenstone, greenschist and layered chlorite schist; 4d, layered volcanic fragmental rocks, greenschist and greywacke in part dioritized; minor layered quartzite, biotite, sericitic schist, and limestone; 4e, acid volcanic flows and tuffs

3 Metasediments of the almandine amphibolite facies, mainly staurolite quartz sub-facies; 3a, hornblende biotite, biotite garnet and amphibolite gneisses; minor kyanite garnet biotite muscovite gneiss, and intimately related hornblende, amphibolite, and diorite gneiss; 3b, layered quartz feldspar, hornblende biotite, hornblende biotite garnet, and amphibolite schist and gneisses, minor thin limy layers represented by crystalline limestone, hornblende plagioclase idocrase and calcite diopside scapolite; 3c, buff-weathering, granular quartz feldspar gneiss; 3d, hornblende, hornblende biotite, hornblende biotite garnet, staurolite garnet, muscovite biotite, hornblende epidote garnet schists; minor quartzite, graphitic schist, amphibolite and crystalline limestone; 3e, similar to 3b but may also be in part composed of 1b

2 Metasediments of greenschist facies including phyllite, slate, and chlorite, sericite, biotite, biotite hornblende, biotite hornblende garnet and graphitic schists; minor meta-greywacke, conglomerate, limestone, and muscovite chloritoid garnet schists; 2a, biotite, chlorite biotite, hornblende, and hornblende biotite schists, and impure layered quartzites; minor limestone, greenstone and greenschist

UPPER PALAEZOIC (?) AND/OR OLDER
1 Gneiss complex, almandine-amphibolite facies, in part sillimanite-almandine sub-facies; gneiss and intimately related migmatitic gneiss; commonly contains and grades into gneissic diorite, quartz diorite, and granodiorite; 1a, quartz microcline biotite gneiss and migmatite; minor hornblende biotite, amphibolite, garnet biotite and diopside hornblende gneiss; 1b, hornblende biotite, amphibolite, and garnet biotite gneiss and migmatite; minor quartz microcline biotite and sillimanite garnet mica gneisses

- Geological boundary (defined, approximate or assumed)
- Bedding, tops known (inclined, overturned)
- Bedding, tops unknown (inclined, vertical)
- Foliation, gneissosity and schistosity (horizontal, inclined, vertical)
- Lineation (inclined)
- Minor fold axes (horizontal, inclined)
- Structural trend (from air reconnaissance and air photographs)
- Fault (approximate or assumed)
- Antiform (approximate)
- Synform (approximate)
- Anticline (overturned)
- Fossil locality
- Limestone
- Graphitic schist
- Conglomerate (intraformational, with granitic clasts)
- Mineral prospect (letter identifies prospect on list in report)
- Radioactive (K-Ar) date on biotite in millions of years

MINERALS
Copper Cu Limestone ls
Gold Au Salt NaCl
Iron Fe Zinc Zn

Geology by W. W. Hutchison, 1962-1965;
A. J. Baer, 1963-1965; J. G. Souther, 1963;
and J. A. Roddick, 1965

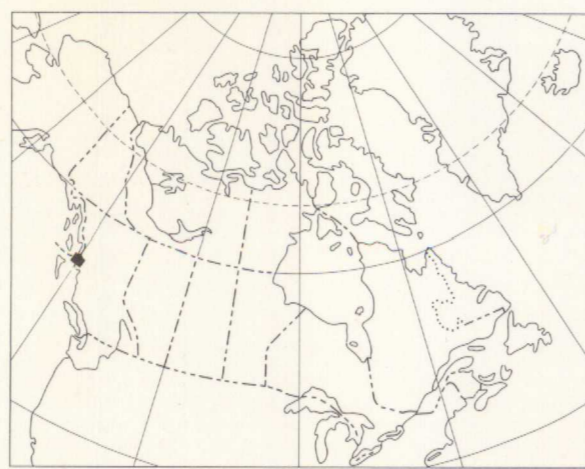
Geological cartography by the Geological Survey of Canada, 1967

Base-map compiled and drawn by the Surveys and Mapping Branch, Department of Lands, Forests, and Water Resources, British Columbia, 1964

Magnetic declination 1967 varies from 26° 58' easterly at centre of west edge to 26° 54' easterly at centre of east edge. Mean annual change: 3.4' westerly



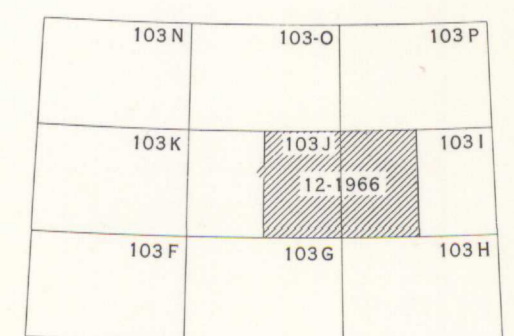
Published 1967, the Centennial of Canadian Confederation 1967/1967



MAP 12-1966
(SUPERSEDES MAP 3-1965)
PAPER 66-33
GEOLOGY
PRINCE RUPERT - SKEENA
BRITISH COLUMBIA
Scale 1:253,440
1 inch to 4 miles
Miles 4 0 4 8 12
Kilometres 6 0 6 12 18

MANUSCRIPT AND
CARTOGRAPHY
FEB 2 1968
SECTION

COAST LAND DISTRICT - RANGE 4 129°00'
Printed by the Surveys and Mapping Branch
Copies of this map may be obtained from the
Director, Geological Survey of Canada, Ottawa



PRINCE RUPERT - SKEENA
BRITISH COLUMBIA