

LEGEND

This legend is common to maps 92N7 (Mount Queen Bess) and 92N10 (Razorback Mountain). Legend blocks with symbols indicate units that appear on this map.

Post-thrusting, post-metamorphic plutons

<b>TERtiARY(?)</b>	
<b>EARLY TERTIARY</b>	
<b>Tt</b>	TIEDEMANN PLUTON: granodiorite, tonalite, lesser quartz diorite; biotite > hornblende, generally unfoliated; lacks secondary alteration
<b>LATE CRETACEOUS to (?) EARLY TERTIARY</b>	Reef-bearing dolomite and Tt unknown
<b>KTD</b>	DORAH CREEK PLUTON: quartz diorite, granodiorite, tonalite; hornblende > biotite; spherule common; generally with compositional layering and weak foliation
<b>KTg</b>	68.2 ± 0.2 Ma (U-Pb on zircon) in whole or part
	Tonalite, quartz diorite, granodiorite; biotite > hornblende, sphene and "magmatic" epidote locally common; unfoliated or weakly foliated; generally lacks secondary alteration

Unit emplaced during deformation and metamorphism

<b>Jkp</b>	67.3 ± 0.3 Ma (U-Pb on zircon) in whole or part
<b>Jkp</b>	PACIFIC (Luv) and DETERMINATION (L Kp) ORTHOGNEISS: tonalitic orthogneiss; biotite > hornblende; common spherule; rare garnet and magnetite; epidote generally lacks secondary alteration

Units below were deformed and metamorphosed between 68 and 68 Ma

Units below probably represent a disrupted stratigraphic sequence, but all contacts between these units are faults

CRETACEOUS UPPER CRETACEOUS

Maroon, purple, grey, rarely green andesitic to basaltic breccia, tuff, and flows; commonly hornblende- and plagioclase-phryic; metamorphosed to greenschist facies

UPPER(?) ALBAN AND YOUNGERT?

TAYLOR CREEK GROUP: quartzite sandstone, siltstone, minor chert-bearing conglomerate; rare light green felsic tuff; sandstone contains detrital mica and epidote

LOWER CRETACEOUS HAUTERIVIAN

IKo CLOUD DRIFTED formation: sandstone, siltstone, minor conglomerate; commonly contains abundant detrital hornblende, conglomerate clasts dominantly felsic and intermediate volcanic rocks and quartzite granitoid rocks

UPPER JURASSIC(?) to LOWER CRETACEOUS HAUTERIVIAN

IKo OTTAWA ROCK formation: green volcanic breccia and tuff, rare flows, minor sandstone and shale; volcanic rocks are dacite and andesite with subordinate but locally abundant basalt and rhyolite; poorly sorted and poorly sorted, metamorphosed to greenschist and amphibolite facies

LATE JURASSIC

154-160 Ma (U-Pb on zircon)

LJH HOMATHKO PEAK TONALITE: tonalite and quartz diorite, unfoliated to weakly foliated; metamorphosed to greenschist facies

UPPER TRIASSIC

UPPER NORIAN

MOSLEY formation: red and grey volcaniclastic sandstone, red siltstone, minor limestone pods

LOWER NORIAN

JkA Maroon and green tuffaceous shale and lapilli tuff

JkC Limestone and subordinate limy shale

UPPER CARBONIAN and LOWER NORIAN

JkMM MT. MORSE formation: maroon and green, basaltic to andesitic volcanic breccia, lesser volcanogenic sandstone and massive greenstone, rare carbonate; volcanic rocks commonly augite-phryic

SYMBOLS

Line of mapping and compilation

Intrusive contact (defined, approximate, assumed or projected beneath ice, water, or younger cover)

Approximate limit of individual "imbricate zone": iu

Thrust fault (defined, approximate, assumed or projected beneath ice, water, or younger cover)

Strike and dip of bedding (inclined, vertical, overturned)

Strike and dip of bedding, tops shown by sedimentary structures (inclined, overturned)

Strike and dip of compositional layering and foliation in granitoid rock

Cleavage (inclined)

Schistosity and gneissic layering (inclined, vertical)

Elongation lineation

Fold hinge line

Trace of fold axis surface and hinge line (overturned antiformal syncline, overturned antiformal anticline)

Approximate trace (solid where approximate, dashed where assumed); denotes on high-grade side, excludes contact metamorphism

B biotite, G garnet, P plagioclase, Sf sillimanite, including fibrolite

IKM K-feldspar-bearing migmatite

Fossil locality and GSC Locality Number; letter in parentheses indicates microfossils (m), conodont (c), or plant fossil (p) (Note 1)

Radiometric date (Ma ± 2 sigma)

hk K-Ar on hornblende

lk U-Pb on zircon

dk K-Ar on muscovite

jk U-Pb on zircon

Muscovite deposit and MINFILE number (Note 2)

xx6

Units below are probably equivalent to one or more units in left hand column

ms	Amphibolite-facies schist and gneiss of sedimentary protolith; in whole or part metamorphosed equivalents of IKo
mv	Amphibolite-facies schist and gneiss of volcanic protolith; in whole or part metamorphosed equivalents of IKo
mg	Gneiss and migmatite rocks of sedimentary and volcanic protolith; possibly metamorphosed equivalents of IKo and IKC
bs	Black slate and siltstone of unknown age (probably Late Triassic to Early Cretaceous)

"imbricate zone": undivided, structurally interleaved slices of all units described on left except Ljk

NOTE 1: FOSSIL LOCALITIES

Fossil collections with GSC Locality Numbers beginning with "C" were made during the present work and locations are accurate to within 50 metres. All other collections were made by H.W. Tipper and party in 1987. Locations were transcribed from old base maps; accuracy of location may vary from within 100 metres to several hundred metres.

NOTE 2: MINERAL DEPOSITS

Locations are taken from British Columbia Geological Survey Branch MINFILE database; accuracies are uncertain.

92N7 (Mount Queen Bess)  
MINFILE number, name, commodities

23 Horn (Cu)  
36 Langara (?)  
37 Standard (Au, Ag)  
39 Aigo (Au, Ag)

SOURCES OF INFORMATION

GEOLOGICAL MAPPING  
M.E. Rasmussen and G.J. Woodsworth, 1988-1989

PREVIOUS WORK  
J.A. Roddick and G.J. Woodsworth, 1976, 1978  
H.W. Tipper, 1987

CONTRIBUTIONS  
J.A. Roddick (Trans. micropaleontology)  
J.A. Jelletz and H.W. Tipper (micropaleontology)  
R.R. Parish and V.J. McMillan (U-Pb dating)

COMPIILATION  
M.E. Rasmussen and G.J. Woodsworth, 1992

RECOMMENDED CITATION

Rasmussen, M.E. and Woodsworth, G.J.  
1993. Geological maps of the Mt. Queen Bess (92N7) and Razorback Mountain (92N10) map areas, Coast Mountains, British Columbia, Geological Survey of Canada, Open File 2586, 2 sheets, scale 1:50 000.

Information concerning location and precise elevation of bench marks can be obtained by writing to the Survey and Mapping Branch, Department of Energy, Mines and Resources, Ottawa, Ontario K1A 0E6, Canada.

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