Énergie, Mines et Ressources Canada / Energy, Mines and Resources Canada
GEOLOGICAL SURVEY OF CANADA — COMMISSION GÉOLOGIQUE DU CANADA
Canada

LEGEND

This legend is common to maps 92N/7 (Mount Queen Bess) and 92N/10 (Razorback Mountain)
Legend blocks with symbols indicate units that appear on this map

Post-thrusting, post-metamorphic plutons

TERTIARY(?)
EARLY TERTIARY(?)

[ ] *TIEDEMANN PLUTON: granodiorite, tonalite, lesser quartz diorite; biotite > or = hornblende; generally unfoliated; lacks secondary alteration*

LATE CRETACEOUS to(?) EARLY TERTIARY
Relationship with KTg and TT unknown

[ ] *DORAN CREEK PLUTON: quartz diorite, granodiorite, tonalite; hornblende > biotite; sphene common; generally with compositional layering and weak foliation*

68.2 ± 0.2 Ma (U-Pb on zircon) in whole or part

[KTg] *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

87.3 ± 0.3 Ma (U-Pb on zircon) in whole or part

[LKP] *PAGODA (LKP) and DETERMINATION (LKD) ORTHOGNEISS: tonalitic orthogneiss; biotite ≥ hornblende; conspicuous titanite and magmatic(?) epidote; generally lacks secondary alteration*

Units below were deformed and metamorphosed between 68 and 88 Ma

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

CRETACEOUS
UPPER CRETACEOUS

[Kv] *Maroon, purple, grey, rarely green andesitic to basaltic breccia, tuff, and flows; commonly hornblende- and plagioclase-phyric; metamorphosed to subgreenschist facies*

UPPER(?) ALBIAN and YOUNGER(?)

[KTC] *TAYLOR CREEK GROUP: quartzose sandstone, siltstone, minor chert-bearing conglomerate, rare light green felsic tuff; sandstone contains detrital mica and epidote*

LOWER CRETACEOUS
HAUTERIVIAN

[lKCD] *"CLOUD DRIFTER formation": sandstone, siltstone, minor conglomerate; sandstone commonly contains abundant detrital hornblende; conglomerate clasts dominantly felsic and intermediate volcanic rocks and quartzose granitoid rocks*

UPPER JURASSIC(?) to LOWER CRETACEOUS
HAUTERIVIAN(?)

[lKO] *"OTTARASKO formation": green volcanic breccia and tuff, rare flows, minor siltstone and shale; volcanic rocks are dacite and andesite with subordinate but locally abundant basalt and rhyolite; poorly stratified and poorly sorted; metamorphosed to greenschist and amphibolite facies*

LATE JURASSIC
154-160 Ma (U-Pb on zircon)

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

UPPER TRIASSIC
UPPER NORIAN

[uTRM] *"MOSLEY formation": red and grey volcaniclastic sandstone, red siltstone, minor limestone pods*

LOWER NORIAN

[uTRs] *Maroon and green tuffaceous shale and lapilli tuff*

[uTRc] *Limestone and subordinate limy shale*

UPPER CARNIAN and(?) LOWER NORIAN

[uTRMM] *"MT. MOORE formation": maroon and green, basaltic to andesitic volcanic breccia, lesser volcanogenic sandstone and massive greenstone, rare carbonate; volcanic rocks commonly augite-phyric*

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

[ ] *Amphibolite-facies schist and gneiss of sedimentary protolith; in whole or part metamorphosed equivalents of lKCD*

[ ] *Amphibolite-facies schist and gneiss of volcanic protolith; in whole or part metamorphosed equivalents of lKO*

[ ] *Gneiss and migmatitic rocks of sedimentary and volcanic protolith; possiblye metamorphosed equivalents of lKO and lKCD*

[bs] *Black shale and siltstone of unknown age (probably Late Triassic to Early Cretaceous)*

[iu] *"Imbricate zone": undivided, structurally interleaved slices of all Hauterivian and older units described on left except LJH*

SYMBOLS

Limit of mapping and compilation

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

Approximate limit of undivided "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 axial surface and hinge line (overturned syncline, overturned anticline, syncline)

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

Approximate trace, with plunge, of F2 axial surface (antiform, synform) — F2 F2

Isograd (solid where approximate, dashed where assumed); designation on high-grade side; excludes contact metamorphism — B
B: biotite in sandstone
G: garnet in pelitic and semipelitic rocks
AS: andalusite, staurolite
SF: sillimanite, including fibrolite
-A: andalusite-out
KM: K-feldspar-bearing migmatite

Fossil locality and GSC Locality Number; letter in parentheses indicates macrofossil (m), conodont (c), or plant fossil (p) **(Note 1)** — • C-116395 (m)

Radiometric date (Ma ± 2 sigma) — • bk 68
bk: K-Ar on biotite
hk: K-Ar on hornblende
mk: K-Ar on muscovite
zu: U-Pb on zircon

Mineral deposit and MINFILE number **(Note 2)** — ⚒76

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 wer made by H.W. Tipper and party in 1967. 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.

92N/10 (Razorback Mountain)
MINFILE number, name, (commodities)

41 K (Cu)
31 Mo (Cu, Mo, Pb, Zn)
19 Blackhorn (Ag, Au, Cu, Pb, Zn)
35 Homestake (Au, Ag, Cu, Zn)
47 Lori (Au, Ag)
43 - (Cu)
30 BU (Cum Mo)
21 MAC (Cu)
20 Niut Mountain (Cu)
18 Lost Fiddle, Evelyn M. (Cu, Ag, Au)

REFERENCES

Roddick, J.A., and Tipper, H.W.
1985: Geology, Mount Waddington [92N] map area; Geological Survey of Canada, Open File 1163, scale 1:125 000, 2 sheets.
Rusmore, M.E., and Woodsworth, G.J.
1988: Eastern margin of the Coast Plutonic Complex, Mt. Waddington map area, B.C.; in Current Research, Part E; Geological Survey of Canada, Paper 88-1E, p. 185-190.
1989: A note on the Coast-Intermontane belt transition, Mount Waddington map area, British Columbia; in Current Research, Part E; Geological Survey of Canada, Paper 89-1E, p. 163-167.
1991: Distribution and tectonic significance of Upper Triassic terranes in the eastern Coast Mountains and adjacent Intermontane Belt, British Columbia; Canadian Journal of Earth Sciences, v. 28, p. 532-541.
1991: Coast Plutonic Complex: a mid-Cretaceous contractional orogen; Geology, v. 19, p. 941-944.
Tipper, H.W.
1969: Mesozoic and Cenozoic geology of the northeast part of Mount Waddington map-area (92N), Coast District, British Columbia; Geological Survey of Canada Paper 68-33, 103 p.

GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Arena	Aréna
City Limits	Limites de ville
Customs	Douane
Ditch	Fossé
Dugout	Abreuvoir
Dump	Dépotoir
Filtration Plant	Usine de filtration
Gas	Gaz
Golf Course	Terrain de golf
Junk Yard	Ferraille
Kiln	Four
Lookout	Belvédère
Mine Waste	Déblai de mine
Oil Wells	Puits de pétrole
Park	Parc
Rink	Patinoire
Senior Citizens Home	Foyer de l'âge d'or
Ski Area	Station de ski
String Bog	Fondrière à filaments
Surveyed Line	Ligne arpentée
Tank	Réservoir
Water	Eau
Winter Road	Chemin d'hiver

For a complete glossary see reverse side
Pour un glossaire complet, voir au verso

ABBREVIATIONS ABRÉVIATIONS

Aband	Abandoned	Abandonné, ée
C	Cemetery	Cimetière
CO	County	Comté
E	Elevator	Élévateur
Fy	Ferry	Traversier
IR	Indian Reserve	Réserve indienne
H	Hospital	Hôpital
L	Lot	Lot
Micro	Microwave	Micro-ondes
Mun	Municipality	Municipalité
P	Post Office	Bureau de poste
PH	Power House	Centrale électrique
RCMP	Royal Canadian Mounted Police	Gendarmerie Royale Canadienne
Res	Reservoir	Réservoir
Trans Sta	Transformer Station	Poste de transformateurs
TFL	Tree Farm Licence	Licence de sylviculture

RAZORBACK MOUNTAIN
COAST LAND DISTRICT RANGE 2
BRITISH COLUMBIA

Scale 1:50 000 Échelle
Miles 1 0 1 2 3 Milles
Metres 1000 0 1000 2000 3000 4000 Mètres

Roads:	Routes:
loose or stabilized surface, all weather	gravier, aggloméré, toute saison (2 lanes or more / 2 voies ou plus; less than 2 lanes / moins de 2 voies)
loose surface, dry weather	de gravier, temps sec
unclassified road or street	route non classée ou rue
cart track	de terre
trail, cut line or portage	sentier, percée ou portage

FOR COMPLETE REFERENCE SEE REVERSE SIDE — POUR UNE LISTE COMPLÈTE DES SIGNES, VOIR AU VERSO

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Information concerning bench marks and horizontal survey monuments can be obtained from Geodetic Survey, Surveys and Mapping Branch, Ottawa.

Pour tout renseignement concernant les repères et bornes altimétriques, s'adresser aux levés géodésiques, Direction des levés et de la cartographie, Ottawa.

CONVERSION SCALE FOR ELEVATIONS — ÉCHELLE DE CONVERSION DES ALTITUDES
Metres 30 20 10 0 50 100 150 200 250 300 Mètres
Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 Pieds

CONTOUR INTERVAL 100 FEET
Elevations in Feet above Mean Sea Level
North American Datum 1927
Transverse Mercator Projection

ÉQUIDISTANCE DES COURBES 100 PIEDS
Altitudes en pieds
Système de référence géodésique nord-américain
Projection transverse de Mercator

Établie par le DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES. Mise à jour à l'aide de photographies aériennes prises en 1977 et 1978 provenant de la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ENVIRONNEMENT, COLOMBIE-BRITANNIQUE. Vérification des ouvrages en 1979. Publiée en 1981.

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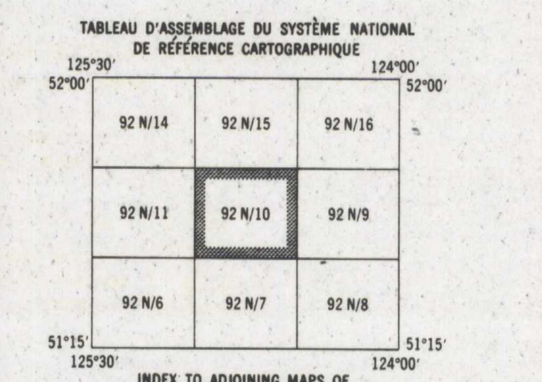

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