

MINERAL HILL INTERLAYERED AMPHIBOLITE - AUGEN GNEISS COMPLEX, LEMHI CO., IDAHO AND RAVALLI CO., MONTANA

REGIONAL GEOLOGIC MAP

Plate 2

EXPLANATION

POST-PRECAMBRIAN

ry, rd rhyolite, porph. rhyodacites post-metamorphic dikes

cbnt, cb carbonatite veins and sills; hydrothermal, syn-tectonic

Tertiary to Cretaceous ?

Precambrian-Y

qt, magt, pch, pcq III, pcy, pcq II, pcq I, Hoodoo Qtz., Ravalli Group? Yellowjacket Fm.

95 ± 5 my Pb- α , monazite Jaffe, 1959

Mid to Late Proterozoic metasedimentary < 1430 my

INTERLAYERED GNEISS COMPLEX

gphr, apl, pgt, bgr, coarse, granophytic or aplitic trondjemite; complex pegmatite

bwg, bpg, pcgg, ggs, biotite granite; white (or pink) augen gneiss; "streaked gneiss"

Mid-Proterozoic meta igneous

wbtgn, white biotite gneiss; tonalite; foliated trondjemite

wgn, whbgn, wfgn, wpgn, felsic, hornblende-quartz-feldspar gneiss; tonalite to granite; undif. gneiss terrain

≥ 1430 my

amp, porphyroblastic amphibolite

hbgn, btgn, hbl, maf, hornblende and biotite gneiss; quartz diorite to granodiorite; hornblende, mafic dike

1415 ± 45 my Pb-Pb, zircon ESR, 1980

om, amf, pcam, om, omf, foliated amphibolite; undif. amphibolite terrain

1450 ± 50 my Rb-Sr, whole rk. Armstrong, 1975

mgb, mdb, metabro, metabase

Mid-Proterozoic metasedimentary

PRE-BELT OR PRICHARD-EQUIVALENT

gns, sch, pcy, pgs, gneiss-schist-quartzite; metacarbonate, silicic acid below & within the interlayered gneiss complex

≤ 1430 my

mgmt, migmatite; metasedimentary or meta-igneous > 1430 my

Mid Proterozoic metasedimentary

inferred fault

strike and dip of bedding

thrust fault or reverse fault, teeth on hanging-wall on upthrown side

strike and dip of foliation or metamorphic layering

geologic contact

plunge of lineation

inferred geologic contact

geologic contact

inferred geologic contact outside the study area

inferred discontinuous nature of interlayers

inferred discontinuous nature of interlayers

inferred discontinuous nature of interlayers

disconformable, branching, porphyritic dikes

disconformable, branching, porphyritic dikes

drafting and field work Jeffrey G. Spence, 1979 reconnaissance, 1979 detailed mapping, 1980

drafting and field work Jeffrey G. Spence, 1979 reconnaissance, 1979 detailed mapping, 1980

MINERALIZED CARBONATITE VEINS

lower Roberts lower Silver King

upper Roberts upper Silver King

LMT vein Lee Buck

Dutchler West Monazite Queen

