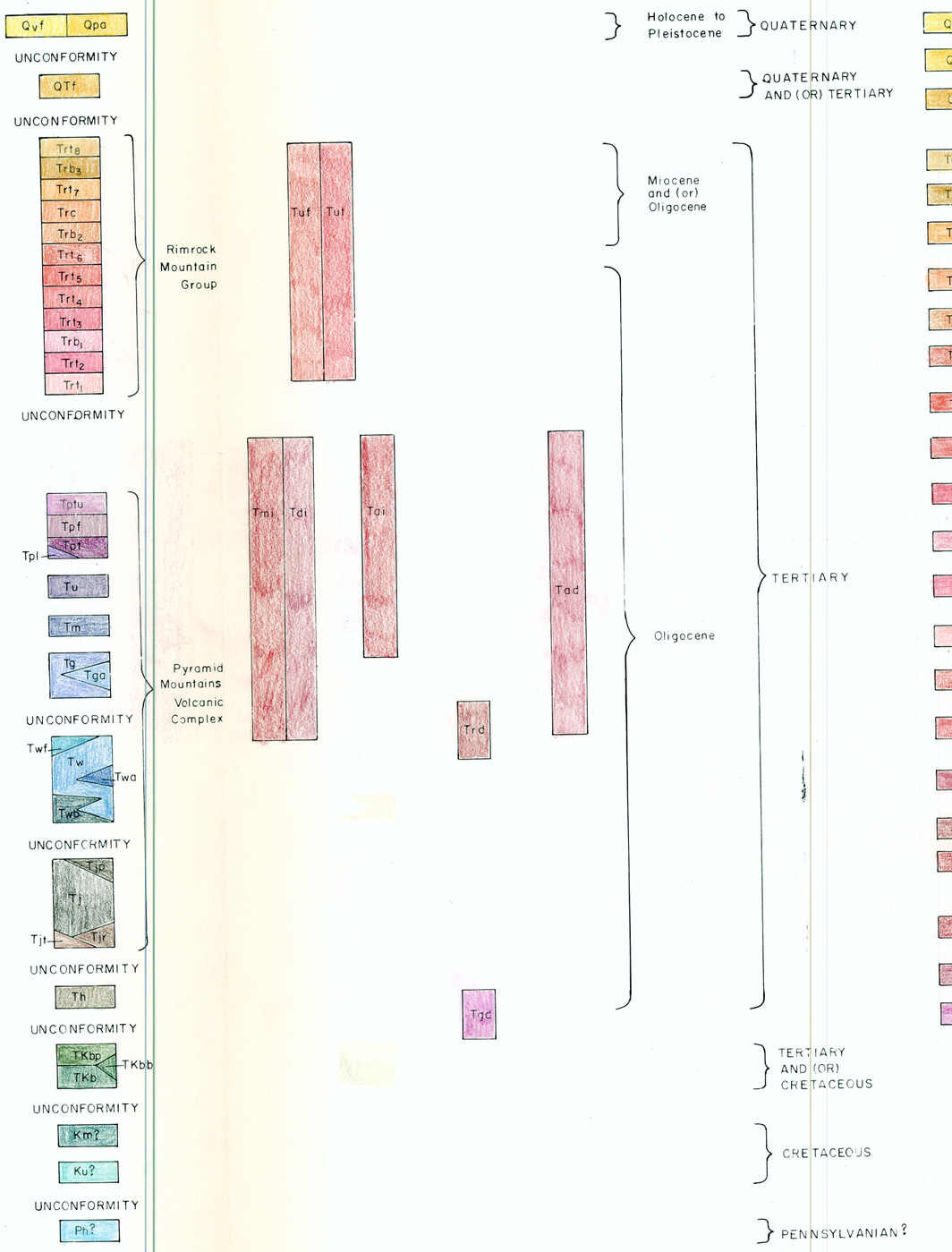
CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

Qvf VALLEY-FLOOR DEPOSITS (Quaternary)— Fluviodeltaic, eolian, and sheetflood deposits, fine sand and silt

Qpa PIEDMONT AND ALLUVIAL DEPOSITS (Quaternary)— Alluvial fan and active wash sediments, poorly sorted gravels and sands

QTf EARLY FANGLOMERATE (Tertiary to Quaternary)— Coarse volcaniclastic fanglomerate

RIMROCK MOUNTAIN GROUP (Oligocene to Miocene?)

Trt8 TUFF 8 — Rhyolite ash-flow tuff, moderately crystal-rich, contains sanidine, quartz, minor oligoclase and biotite

Trb3 BASALTIC ANDESITE 3 — Flows, contain phenocrysts of andesine and augite; local volcaniclastic conglomerate

Trt7 TUFF 7 — Rhyolite ash-flow tuff and pumiceous sandstone, tuff is crystal-poor to moderately crystal-rich, contains sanidine, quartz, biotite, trace augite and hornblende

Trc CONGLOMERATE AND SANDSTONE — Volcaniclastic boulder conglomerate and sandstone

Trb2 BASALTIC ANDESITE 2 — Aphanitic andesite, groundmass contains plagioclase, magnetite, augite

Trt6 TUFF 6 — Rhyolite ash-flow tuff, strongly welded, crystal-rich, contains oligoclase, sanidine, quartz, biotite, trace hornblende

Trt5 TUFF 5 — Rhyolite ash-flow tuff, crystal-poor, contains sanidine, plagioclase, trace quartz and biotite, also air-fall tuff and sandstone

Trt4 TUFF 4 — Rhyolite ash-flow tuff, strongly welded, moderately crystal-rich, contains plagioclase, quartz, sanidine, minor biotite, trace hornblende or augite

Trt3 TUFF 3 — Rhyolite ash-flow tuff, crystal-poor to moderately crystal-rich, contains quartz, sanidine, oligoclase, minor biotite, trace hornblende; sediments at the base

Trb1 BASALTIC ANDESITE 1 — Flows, microporphyritic, contains augite, andesine, magnetite, trace olivine, in Three mile Hills, porphyritic andesine-pyroxene-biotite andesite

Trt2 TUFF 2 — Rhyolite or quartz latite ash-flow tuff, moderately crystal-rich, strongly welded, contains plagioclase, biotite, minor hornblende, trace sanidine, augite

Trt1 TUFF 1 — Rhyolite ash-flow tuff, crystal-poor, contains sanidine, minor quartz, trace plagioclase and biotite; sediments at the base

Tuf RHYOLITE FLOWS, UNASSIGNED (Oligocene?) — Crystal-poor flow-banded rhyolite, contains plagioclase, quartz, sanidine

Tut RHYOLITE TUFF, UNASSIGNED (Oligocene) — Ash-flow tuff, welding variable, moderately crystal-rich, contains quartz, sanidine, plagioclase, sparse biotite, conspicuous pumice lenses

Tad ANDESITE DIKES (Oligocene?) — Aphanitic to porphyritic dikes, variable mineral content, most common type resembles andesite of Holtkamp Canyon

Trd RHYOLITE DIKES (Oligocene?) — Aphanitic, white rhyolite

Tai ANDESITE PORPHYRY (Oligocene)-Small intrusive stock, moderately crystal-rich, contains plagioclase, augite

COMPOSITE STOCK (Oligocene)

Tmi MONZONITE PORPHYRY-Contains plagioclase phenocrysts in groundmass of feldspars, magnetite, chloritized ferromagnesian minerals

Tdi DIORITE — Fine grained, contains andesine-labradorite, magnetite, biotite, augite, hornblende

Tgd QUARTZ LATITE DIKE (Oligocene?) — Porphyritic, crystal-poor, contains andesine, biotite in groundmass of quartz, plagioclase, and sanidine

PYRAMID MOUNTAIN VOLCANIC COMPLEX (Oligocene)

RHYOLITE OF PYRAMID PEAK

Tptu Upper Tuff Member - Basal sandstone, medial breccia with clasts of flow member, upper ash-flow tuff

Tpf Flow Member - Crystal-poor, contains oligoclase-andesine and biotite

Tpt Lower Tuff Member — Pumiceous tuff, sandstone, volcaniclastic conglomerate

Tpl Lake Deposits - Laminated sandstone, volcaniclastic conglomerate, freshwater limestone

Tu LATITE OF UHL WELL — Flows and dikes, moderately crystal-rich, contains plagioclase, augite and hornblende in lowest flows, biotite through most of the unit

Tm ANDESITE OF MANSFIELD SEEP — Flows, moderately crystal-rich, contains andesine, hornblende, augite

TUFF OF GRAHAM WELL

Tg Tuff Member - Quartz latite ash-flow tuff, moderately crystal-rich, contains oligoclase-andesine, biotite, trace quartz and sanidine

Tga Andesite Member - Local flows intercalated in tuff member; resembles andesite of Woodhaul Canyon

TUFF OF WOODHAUL CANYON

Twf Flow Member — Crystal-poor rhyolite flows

Tw Tuff Member — Rhyolite ash-flow tuff, crystal-poor, contains andesine, biotite, minor sanidine, abundant lithic inclusions, usually altered

Twa Andesite Member — Flows intercalated with tuff member

Twb Breccia Member — Blocks of andesite, conglomerate, limestone, granite in tuff matrix

RHYOLITE OF JOSE PLACENCIA CANYON

Tj Flow Member — Domes and flows of crystal-poor flow-banded rhyolite, contains oligoclase-andesine, minor biotite, trace quartz and sanidine

Tjp Porphyritic Member — Local dikes and flows of crystal-rich rhyolite, contains oligoclase and sparse biotite, stratigraphic position uncertain

Tjr Rhyodacite Member - Flows, similar to flow member but contain more biotite

Tjt Tuff Member — Resembles tuff of Woodhaul Canyon except in stratigraphic position

Th ANDESITE OF HOLTKAMP CANYON (Oligocene) — Porphyritic andesite flows and breccias, mostly crystal-rich, contains andesine, augite, rare hypersthene, hornblende, some flows are aphanitic, locally includes felsic tuff

BASALT (Cretaceous or early Tertiary)

TKbp Porphyritic Member — Resembles aphanitic member but contains plagioclase phenocrysts

TKbb Breccia Lentil - Volcaniclastic sandstone and breccia

TKb Aphanitic Member — Propylitized basalt, contains andesine, secondary iron oxides and calcite

Km? MOJADO? FORMATION (Lower? Cretaceous) — Orthoquartzite

Ku? U-BAR? FORMATION (Lower? Cretaceous) — Fossiliferous limestone

Ph? HORQUILLA? FORMATION (Pennsylvanian?) — Fusulinid-bearing limestone

CONTACT — Dashed where approximately located

FAULT — Dashed where approximately located, dotted where concealed. Bar and ball on downthrown side, unless shown by U or D

STRIKE AND DIP OF BEDS AND OF COMPACTED ASH-FLOW TUFFS:

25 Inclined, with dip

Vertical

STRIKE AND DIP OF FOLIATED LAVA FLOWS AND DOMES:

25 Inclined, with dip

Vertical

VEIN OR MINERALIZED FAULT

SHAFT

HOT WELLS