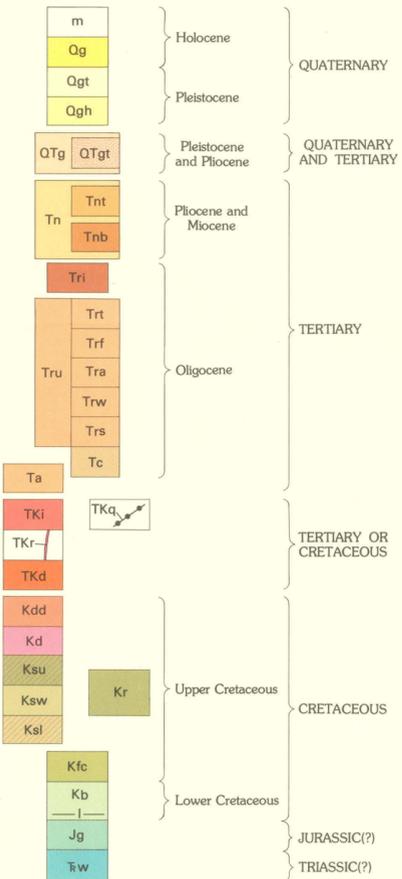


CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- m MINE WASTE
- Og GRAVEL AND SAND (HOLOCENE)—Alluvium on floodplains and low terraces
- Ogt GRAVEL (PLEISTOCENE)—Alluvium on high terraces
- Ogh GRAVEL (PLEISTOCENE)—Alluvium on high surfaces, capped by well-developed red soil
- Otg GRAVEL AND SAND (PLEISTOCENE AND PIOCENE)—Alluvium of basins. Locally slightly indurated
- QTgt Tuffaceous sandstone lentil
- Tn NOGALES FORMATION (PLIOCENE AND MIOCENE): Gravel and conglomerate
- Tnt Rhyolitic tuff and tuffaceous sandstone. Some tuff also underlies basalt flow, Tnb
- Tnb Basalt flow—Dark-gray amygdaloidal olivine-basalt. Dated as 13.5, 13.8 m.y.
- Tri RHYOLITIC INTRUSIVE ROCK (OLIGOCENE)—Sparsely porphyritic dikes and plugs. May be related to a volcanic center at Manzanita Mountain in sec. 35, T. 23 S., R. 11 E.
- Tru RHYODACITIC AND RHYOLITIC EXTRUSIVE ROCKS (OLIGOCENE): Rhyodacitic and rhyolitic extrusive rocks, undifferentiated
- Trt Tuff and tuff breccia
- Trf Lava flow—Mostly rhyolitic but includes some gray rhyodacitic and dacitic lava. Dacite in Bear Valley may underlie the rhyolitic volcanic pile to north
- Tra Agglomerate
- Trw Rhyodacite welded tuff—May include other volcanic rocks
- Trs Volcanic sandstone and conglomerate
- Tc CONGLOMERATE AND FANGLOMERATE (OLIGOCENE):
- Ta ANDESITIC ROCKS (TERTIARY)—Propylitized andesite or dacite lava
- TKi INTRUSIVE DIORITE AND ANDESITE (TERTIARY OR CRETACEOUS)—Dikes of diorite, andesite, and some of porphyritic latite
- TKq QUARTZ VEINS (TERTIARY OR CRETACEOUS)—Locally mineralized
- TKr RHYODACITE PORPHYRY DIKES (TERTIARY OR CRETACEOUS)—Medium-gray, fine-grained, with fairly abundant fine phenocrysts of plagioclase, amphibole, and biotite, and with quartz in the groundmass. Moderately altered. Probably equivalent to diorite at Ruby of Knight (1970)
- TKd PORPHYRITIC DACITE DIKES (TERTIARY OR CRETACEOUS)—Light-greenish-gray to bluish-gray, with moderately abundant and moderately coarse phenocrysts of plagioclase, amphibole, and biotite. Quartz sparse or absent. Strongly altered. Probably equivalent to diorite at Blue Ribbon and diorite at Sidewinder, both of Knight (1970)
- Kdd DIORITE AND DACITE PORPHYRY (UPPER CRETACEOUS?)—Stocks and intrusive pods of diorite, microdiorite, and coarse-grained dacite porphyry. Age assignment uncertain. Possibly correlative with Josephine Canyon Diorite of Santa Rita and Patagonia Mountains
- Kd DACITIC ROCKS (UPPER CRETACEOUS?)—Intrusive pods and dikes of fine-grained dacite and andesite(?). Age assignment uncertain
- Ksu SALERO FORMATION (UPPER CRETACEOUS): Upper member—Conglomerate and sandstone; coarse angular to subangular clasts mostly of volcanic detritus
- Ksw Welded tuff member—Rhyodacite welded tuff; includes small lentils of arkose and conglomerate to west
- Ksl Lower member—Dacitic volcanic rock and intercalated sedimentary rocks
- Kr RHYODACITE PORPHYRY (CRETACEOUS)—Massive intrusive or extrusive rock
- Kfc FORT CRITTENDEN(?) FORMATION (UPPER CRETACEOUS)—Reddish-brown conglomerate and sandstone; clasts subrounded to subangular, mainly of volcanic detritus; some of laminated limestone, apatite, quartzite
- Kb BISBEE(?) FORMATION (LOWER CRETACEOUS)—Mainly gray to olive brown arkosic sandstone, siltstone, and conglomerate; includes some limestone. Volcanic clasts in conglomerate may indicate presence of rocks younger than the Bisbee Formation. Equivalent to Oro Blanco Conglomerate of Fowler (1938)
- Ww LIMESTONE BED—Thin beds of laminated limestone and of pelecypod-shell bioclastic limestone typical of the Bisbee Formation



- Jg GRANITE (JURASSIC?)—Coarse-grained granite or quartz monzonite
- Ww MOUNT WRIGHTSON(?) FORMATION (TRIASSIC)—Strongly indurated flow-laminated rhyolite lava flows
- - - CONTACT—Dashed where inferred or gradational; dotted where concealed. Queried where uncertain
- - - NORMAL FAULT, SHOWING DIP—Dashed where inferred; dotted where concealed. Bar and ball on downthrown side
- ▲-▲- THRUST FAULT—Dashed where inferred. Sawteeth on upper plate
- >->- FAULTS ON CROSS SECTION—Arrow couple shows relative movement. Queried where basis for projection is lacking
- ↘ STRIKE OF AXIS OF SYNCLINE—Showing plunge
- 10 STRIKE AND DIP OF BEDS
- 10 Inclined
- 10 Vertical
- 40 STRIKE AND DIP OF FOLIATION
- x PROSPECT PIT
- ADIT
- ×13.5 SAMPLE SITE—Showing age of rock in m.y.

GEOLOGIC MAP AND STRUCTURE SECTIONS OF PARTS OF THE RUBY QUADRANGLE, ARIZONA