



EXPLANATION

Surficial deposits
Qal, alluvium
Qls, landslide

Gila Conglomerate
QTg, Gila Conglomerate; may include basaltic lava flows and colluvium or pediment deposits
QTgb, basaltic lava flows predominant; may include fluvialite deposits
bd, basaltic dike

Basaltic andesite
Tba, flows and flow breccia ranging in composition from trachyandesite with siliceous to quartz latite; subvolcanic fluvialite layers
Tbt, peraluminous rhyolite ash-flow tuff and associated pyroclastic and fluvialite deposits
Tad, basaltic andesite dike

Rhyolite of Red Mountain
Trt, rhyolite lava flows and intrative rhyolite
Trf, rhyolite ash-flow tuff
Td, rhyolite dike

Rhyolite tuff
Trb, volcanic and fluvialite breccia, crossbedded sandstone, and conglomerate. Contact with bounding volcanic rocks commonly indistinct or gradational
Tra, rhyolite ash-flow sheet; quartz and siliceous feldspar commonly monocrystalline phenocrysts common; locally includes other pyroclastic flows, lava flows, and fluvialite deposits

Pyroxene-hornblende andesite
Ta, lava flows, flow breccia, and subvolcanic pyroclastic breccia, all cut by numerous andesite dikes
ad, andesite dikes; some may be related to younger andesite-dacite flows

Epiclastic volcanic rocks
Ts, south and east parts, lahar and mudflow-type breccia grade into andesite flow breccia and lava flows; northwest part, fluvialite breccia, conglomerate, sandstone, and siltstone prevalent, but includes conglomerate bed with clasts of fossiliferous Permian limestone and Precambrian granite as much as 100 feet thick
Taf, andesite lava flows; mapped only locally

Quartz latite and rhyolite
Tr, intracrustal complex
Trq, quartz latite or rhyolite dike
Qr, perite locality

EROSIONAL UNCONFORMITY
Tba, Tbt, Ttr, Ttrb, Ttrf, Ttrq, Ttrd, Ttrb, Ttrf, Ttrq, Ttrd

EROSIONAL UNCONFORMITY
Ta, ad, Tba, Tbt, Ttr, Ttrb, Ttrf, Ttrq, Ttrd

Contact, showing dip
Dashed where approximately located; short dashed where inferred, indistinct, or gradational

Fault, showing dip
Dashed where approximately located; short dashed where inferred; dotted where concealed. Bar and ball on downthrow side

Vein in fault zone
East of Blue River opposite mouth of Strayhorn Creek

Dike along fault

Strike and dip of bedding
Inclined Vertical

Strike and dip of flow layers or compaction foliation

Magnetic contours
Showing total intensity of earth's magnetic field in gauss, relative to arbitrary datum; hachured to indicate closed areas of lower magnetic intensity. Contour interval 20 gauss

Location of measured maximum or minimum intensity within closed high or closed low

Flight path
Showing location and spacing of data

Rapid-rock chemical analysis
88-1008

K-Ar isotope age determination
88-898

Where combined
88-898A

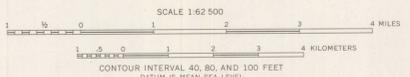
Locality of rock samples

Area of hydrothermally altered rocks
Density of pattern approximately intensity of alteration

Approximate boundary of the Blue Range Primitive Area
From U.S. Forest Service, August 1968

Approximate boundary of primitive area
From U.S. Forest Service, August 1968

Base from U.S. Geological Survey:
Hannagan Meadow, Arizona, 1:62,500, 1958
Blue, Arizona-New Mexico, 1:62,500, 1961
Moreno, Arizona-New Mexico, 1:125,000, 1913
Alma, New Mexico, 1:24,000, 1963; Saltz Pass,
New Mexico, 1:24,000, 1963



Geology by J. C. Rutté, E. R. Landis and
D. L. Gaskill, 1967-1968; modified from
Weber and Willard (1959) in New Mexico
Aeromagnetic survey flown at 10,500 feet
barometric elevation; flight-line spacing
one mile.

GEOLOGIC MAP OF THE BLUE RANGE PRIMITIVE AREA, ARIZONA-NEW MEXICO