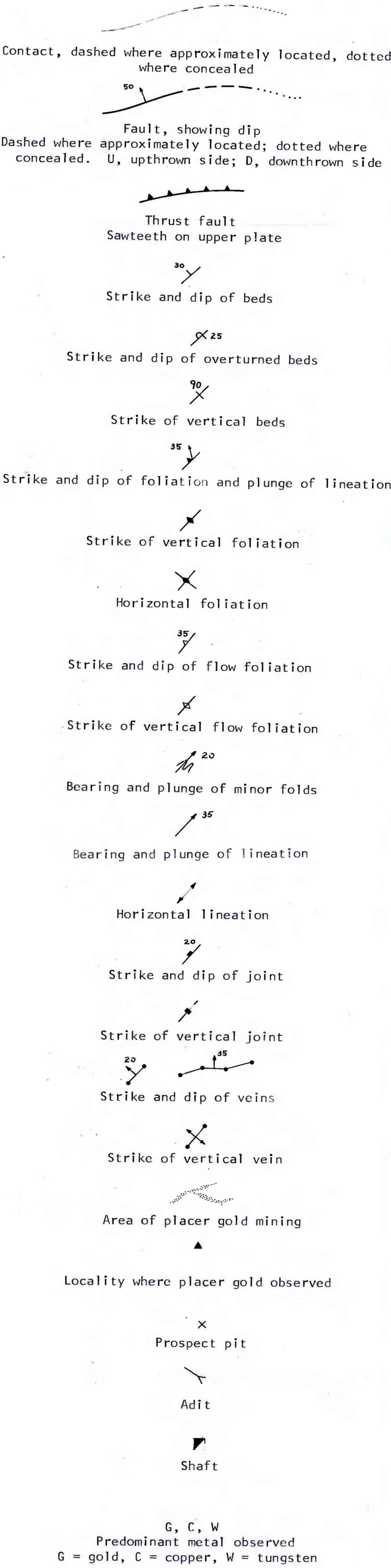


DESCRIPTION OF MAP UNITS

QUATERNARY	Qg	YOUNGER GRAVEL	Holocene alluvium along active washes; locally includes talus and colluvium
	Qgo	OLDER GRAVEL	Poorly consolidated fanglomerate of inactive alluvial fan segments presently being dissected. Detrital gold is locally concentrated during erosion of this older gravel
	Ql	LANDSLIDE DEPOSITS	Chaotic landslide deposits in older lakebed deposits along Hualapai Wash
	QTg	QUATERNARY OR TERTIARY GRAVEL	High level, dissected alluvial fan remnants along Grapevine Wash
PLIOCENE	Tcs	ANCESTRAL COLORADO RIVER SEDIMENTS	Unconsolidated silt, sand and well rounded gravel in scattered, high level remnants of the ancestral Colorado River
	Tml	LAKEBEDS	Limestone and playa deposits of the Muddy Creek Formation
	Tmf	FANGLOMERATE	Moderately to well consolidated alluvial fan deposits of the Muddy Creek Formation. Includes lenses of rhyolitic tuff and mudflow breccia. Dissection of these deposits has been accompanied by local concentration of detrital gold
	Tmbx	MONOLITHOLOGIC BRECCIA	Precambrian-clast sedimentary breccia of mudflow or landslide origin within the Muddy Creek Formation
MIOCENE (5 to 15 m.y.)	Tb	BASALT	Flows capping Iron Mountain and plugs near Iron Spring Basin
	Tg	GRAVEL	Well consolidated rounded gravel in channels beneath basalts of Iron Mountain
	UNCONFORMITY		
	Ts	RHYOLITIC TUFFACEOUS SEDIMENTS	Steeply dipping bedded rhyolitic tuff and well consolidated fanglomerate in a downfaulted block in the central part of the quadrangle. Probably equivalent to the middle Miocene Mount Davis Volcanics (12-15 m.y.)
LATE CRETACEOUS (65 to 72 m.y.)	Tf	FANGLOMERATE	Moderately consolidated, coarse alluvial fan deposits and intercolated landslide or mudflow breccia. Faulted against Precambrian and Mesozoic rocks, southwest and northwest corners of the quadrangle. Probably equivalent to the upper part of the Mount Davis Volcanics
	UNCONFORMITY		
	Kqm	QUARTZ MONZONITE (Late Cretaceous)	Medium- to coarse-grained, seriate to porphyritic leucocratic quartz monzonite, includes minor aplite and pegmatite. Associated with peripheral gold-quartz veins in the Gold Basin district
	UNCONFORMITY		
CAMBRIAN	€m	MUAV LIMESTONE (Middle Cambrian)	Dull gray, aphanitic limestone, mottled with tan siltstone, massive bedded forming prominent cliffs along eastern edge of quadrangle
	€ba	BRIGHT ANGEL SHALE (Lower to Middle Cambrian)	Green to red-brown, thin bedded shale and fine-grained sandstone, with some dolomite and thin bedded limestone near top
	€t	TAPEATS SANDSTONE (Lower Cambrian)	Brown coarse-grained quartzitic sandstone, conglomeratic near base, massive bedded, cliff forming in lower part, becoming thinner bedded and shaley toward the top
	UNCONFORMITY		
LATE PRECAMBRIAN	db	DIABASE (Late Precambrian)	Dikes, sills and plugs of fine-grained to coarse-grained diabase, locally with small pegmatitic and feldspathic segregations
	p	PEGMATITE	Dikes and lenticular masses of granite pegmatite, predominantly older Precambrian but may include rocks of Late Cretaceous age.
	pqm	PORPHYRITIC QUARTZ MONZONITE	Coarse-grained porphyritic to seriate biotite quartz monzonite, grading to biotite-hornblende granodiorite along the margins of the Garnet Mountain pluton. The dominant plutonic rock, widely exposed in the southern and northwestern parts of the quadrangle
	qm	QUARTZ MONZONITE	Medium-grained, equigranular to sparsely porphyritic granite to quartz monzonite, forms small plutons associated with the coarse-grained porphyritic quartz monzonite
OLDER PRECAMBRIAN (1400 to > 1700 m.y.)	lqm	LEUCOCRATIC QUARTZ MONZONITE	Light gray, fine- to medium-grained equigranular quartz monzonite and granite occurring as dikes and lenticular plutons in the plutonic complex of Garnet Mountain
	gd	GRANODIORITE	Gray, medium-grained equigranular biotite and biotite-hornblende granodiorite
	ggd	GNEISSIC GRANODIORITE	Olive to reddish gray, weakly to strongly foliated, medium grained equigranular biotite granodiorite. Occurs largely as concordant bodies within the paragneiss of the Gold Basin district
	al	ALASKITE	White to light gray, aplitic granite and quartz monzonite, pegmatitic segregations common, locally gneissic
	mal	MIGMATITIC ALASKITE COMPLEX	Swarms of alaskite, aplite and pegmatite dikes, and pegmatoid quartz veins, cutting paragneiss
	mig	MIGMATITE	Dominantly medium-grained sparsely porphyritic quartz monzonite complexly injected into paragneiss, biotite schist, and amphibolite terrane in the central part of the quadrangle
	mgd	MIXED GRANODIORITIC COMPLEX	Intrusive complex dominantly medium-grained granodiorite, mixed with porphyritic granodiorite and quartz monzonite, and leucocratic fine- to medium-grained quartz monzonite
	mgn	MIGMATITIC GNEISS	Predominantly amphibolite-facies paragneiss complexly injected by granitic rocks of the Garnet Mountain suite
	fgn	FELDSPATHIC GNEISS	Light gray, fine- to medium-grained quartz-plagioclase gneiss, massive to layered, commonly exhibiting a strong linear fabric
	pgn	PARAGNEISS	Undifferentiated assemblage of amphibolite-facies metasedimentary rocks, dominantly quartz-plagioclase gneiss interlayered with cordierite gneiss, biotite-garnet-sillimanite schist, and amphibolite. Thin lenses of marble, calc-silicate gneiss, banded iron formation, and metachert can locally be recognized. This high-grade, regionally metamorphosed terrane has been strongly deformed during several periods of folding, granitic intrusion, and faulting. Wide areas have been hydrothermally altered with development of propylitic mineral assemblages, probably during the Late Cretaceous plutonic and hydrothermal episode resulting in widespread gold and associated base metal mineralization
	am	AMPHIBOLITE	Foliated and lineated hornblende and hornblende-plagioclase gneiss interlayered with quartz-feldspathic paragneiss and biotite schist. Commonly laminated and associated with calc-silicate lenses

EXPLANATION OF MAP SYMBOLS



EXPLANATION TO ACCOMPANY
PRELIMINARY GEOLOGIC MAP OF THE GARNET
MOUNTAIN QUADRANGLE, MOHAVE COUNTY, ARIZONA

BY
P. M. BLACET

1975

This report is preliminary and has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.