



CORRELATION OF MAP UNITS

Qa	Holocene	QUATERNARY
Unconformity		
Tb	Pliocene and Miocene(?)	TERTIARY
Unconformity		
Rmu	Lower Triassic	TRIASSIC
Rms		
Rmlr		
Rmv		
Unconformity		
Pkh	Lower Permian	PERMIAN
Pkl		

DESCRIPTION OF MAP UNITS

- Qa ALLUVIUM—Ephemeral stream alluvium consisting of predominantly cobble- to silt-size particles and minor amounts of boulders and clay-size particles
- Tb BASALT—Flows of dark-gray dense fine-grained basalt; probably extruded between 2 m.y. and 10 m.y. ago (Smith, unpub. data, 1976; Lundke and Smith, 1976). Total thickness at least as great as 360 ft (110 m)
- MOENKOPF FORMATION (LOWER TRIASSIC)—Divided into:
 - Rmu Upper red member—Red laminated siltstone and tan and red medium- to coarse-grained sandstone and pebble conglomerate. Only a part, about 330 ft (100 m), is well exposed; base is exposed only in slump blocks; upper part was removed by pre-Pliocene erosion
 - Rms Shabakob Member—Interbedded white laminated dolomite and white gypsum; red siltstone is minor component. Minimum thickness of member is about 590 ft (180 m); in exposure about 1 mi (1.5 km) east of study area, thickness is about 790 ft (240 m)
 - Rmlr Middle red member—Predominantly red, laminated siltstone and white to gray gypsum. About 165 ft to 200 ft (50 m to 60 m) thick
 - Rmv Virgin Limestone Member—Dominated by three ledge-forming fossiliferous limestone beds, which are interlayered with white gypsum and green mudstone. Member is about 80 ft (25 m) thick
 - Rmlr Lower red member—Predominantly interlayered red siltstone and gray and white gypsum. Lower red member ranges in thickness from about 65 ft to 200 ft (20 m to 60 m). In several exposures, includes basal limestone conglomerate and overlying brown crossbedded calcareous sandstone or yellow calcareous siltstone of Tinjowap Member, oldest member of the Moenkopf recognized in northwestern Arizona. Thickness of the Tinjowap Member ranges from less than 1 ft (30 cm) to about 115 ft (35 m)
- Rmu MOENKOPF FORMATION, UNDIVIDED (LOWER TRIASSIC)—Much is internally chaotic landslide material and internally coherent slump blocks. Small amounts of tertiary basalt, which mantled the Moenkopf before sliding, are also included. In some areas, Moenkopf is poorly exposed because of vegetative cover or because of colluvium, which is commonly basaltic debris
- Pkh KAIBAB LIMESTONE (LOWER PERMIAN)—Divided into:
 - Harrisburg Gypsiferous Member—Predominantly red and white gypsum and gypsiferous siltstone; minor interbedded limestone near base; brachiopod-bearing limestone below arenaceous cherty dolomite at top. Unit thickness ranges from about 80 ft to 200 ft (25 m to 60 m). Equivalent to alpha member of McKee (1938)
 - Pkl Limestone member—Cliff-forming gray fossiliferous marine limestone containing abundant black-chert nodules. Unit is more than 280 ft (85 m) thick. Equivalent to beta member of McKee (1938).

- Contact - Dashed where approximately located
- - - Fault - Dashed where approximately located; dotted where inferred or concealed; ball and bar on downthrown side
- - - Anticline - Showing trace of axial plane and plunge of axis; dashed where approximately located
- - - Syncline - Showing trace of axial plane and plunge of axis; dashed where approximately located
- ~ Strike and dip of beds
 - ~10° Inclined
 - ~0° Horizontal
 - ~? Uncertain
- Boundary of natural area
- Boundary of instant study area
- 20 Stream sediment sample locality
- X 20 Bedrock sample locality

U. S. Geological Survey
OPEN-FILE REPORT
This report is preliminary and has not been edited or reviewed for conformity with Geological Survey Standards and nomenclature

Geology Mapped 1978

Base from U.S. Geological Survey Wolf Hole Mtn. N.W. and Wolf Hole Mtn. S.W. unedited advance prints, 1974

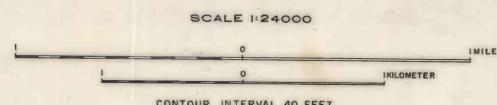


Figure 1 RECONNAISSANCE GEOLOGIC MAP OF THE TURBINELLA-GAMBEL OAK INSTANT STUDY AREA, MOHAVE COUNTY, ARIZONA
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Mineral Surveys Related to Bureau of Land Management Instant Study Areas

In accordance with the provisions of the Federal Land Policy and Management Act (Public Law 94-379, October 21, 1976), the Geological Survey and Bureau of Mines have conducted mineral surveys on certain areas, which formally had been identified as "natural" and "primitive" areas prior to November 1, 1975. This report discusses the results of a mineral survey of the Turbinella-Gambel Oak Instant study area, Mohave County, Arizona.