

CORRELATION OF MAP UNITS

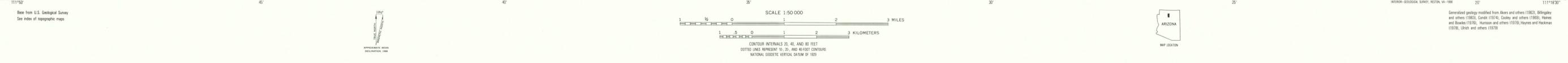
Qal	QUATERNARY	WKA AVE 1955	WESWAVE 1955
Qev		WKA AVE 1955	WESWAVE 1955
Tcp	TRIASSIC	WKA AVE 1955	WESWAVE 1955
Tca		WKA AVE 1955	WESWAVE 1955
Tm		WKA AVE 1955	WESWAVE 1955
Pk	PERMANIAN	WKA AVE 1955	WESWAVE 1955
PDU	PERMANIAN TO DEVONIAN	WKA AVE 1955	WESWAVE 1955
Cu	CAMBRIAN	WKA AVE 1955	WESWAVE 1955

- LIST OF MAP UNITS**
- Qal Alluvium (Quaternary)
 - Qev Extrusive volcanic rocks (Quaternary)
 - Tcp Chinle Formation, Petrified Forest Member (Triassic)
 - Tca Chinle Formation, Shinarump Member (Triassic)
 - Tm Moenkopi Formation (Triassic)
 - Pk Kaibab Limestone (Permian)
 - PDU Toroweap Formation (Permian), Coconino Sandstone (Permian), Hermit Shale (Permian), Supai Group (Permian-Pennsylvanian), Redwall Limestone (Mississippian), and Temple Butte Limestone (Devonian), undivided
 - Cu Musky Limestone, Bright Angel Shale, and Tapeats Sandstone, undivided (Cambrian)

- Contact—Approximately located; dotted where concealed
- Fault—Bar and ball on downthrown side. Dashed where approximately located; dotted where concealed
- Anticline—Showing trace of crestline
- Syncline—Showing trace of trough plane
- Monocline—Showing trace of lower axis unless both axes shown. Length of arrows inversely proportional to relative dip of beds
- Monocline—Showing approximate trace of center of monocline
- Collapse feature—Showing outline of feature, number (4), sample location for geochemical analysis (A), and maximum surface gamma radiation (3.5x). Dashed where approximately located. Maximum surface gamma radiation detected by traverses using a scintillometer and expressed as the number of times the background level. For the features not showing a radiation level, the surface radiation was not above the background level. Features designated solely by a B or an L are additional collapse features or breccia pipes supplied by Billingsley and others (1965, B) or by Loughlin (1963, L) and have not been field checked. Map units are deeper color within collapse features

INDEX SHOWING LOCATION OF STUDY AREA AND 1:24,000- AND 1:62,500-SCALE TOPOGRAPHIC MAPS

SHEET 1	YERINO TEMPLE 1962	BLUE SPRING 1955	WKA AVE 1955	WESWAVE 1955
SHEET 2	GRANDVIEW POINT 1962	COCONINO POINT 1962	WKA AVE 1955	WESWAVE 1955
	GRANDVIEW 1962	S.P. MTS 1962	WKA AVE 1955	WESWAVE 1955
	GRANDVIEW 1962	S.P. MTS 1962	WKA AVE 1955	WESWAVE 1955



SOUTHERN PART
MAP SHOWING STRUCTURAL CONTROL OF BRECCIA PIPES ON THE SOUTHERN MARBLE PLATEAU, NORTH-CENTRAL ARIZONA

By
Hoyt B. Sutphin and Karen J. Wenrich
1988

Geological sketches modified from others and others (1963), Billingsley and others (1965), Condit (1974), Cooley and others (1980), Harris and Brunk (1976), Condit (1974), Cooley and others (1980), Harris (1976), Clark and others (1978)