



GEOLOGIC MAP OF THE SWANSEA-COPPER PENNY AREA, CENTRAL BUCKSKIN MOUNTAINS, WEST-CENTRAL ARIZONA

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(Sheet 1 of 1, with text)

MAP UNITS

Postdetachment Units

Qa	YOUNG ALLUVIAL DEPOSITS (QUATERNARY)
Qo	OLD ALLUVIAL DEPOSITS (QUATERNARY)
QTo	VERY OLD ALLUVIAL DEPOSITS (QUATERNARY TO LATE TERTIARY)
Tbf	BASIN-FILL DEPOSITS (LATE TERTIARY)
Tbfx	BASIN-FILL BRECCIA DEPOSITS (LATE TERTIARY)
Tbfv	BASIN-FILL VOLCANICLASTIC DEPOSITS (LATE TERTIARY)

Upper-Plate Units

Tss ₂₄	SANDSTONE (#24)(MIOCENE)
Ts ₂₃	SEDIMENTARY ROCKS (#23)(MIOCENE)
Tv ₂₂	VOLCANIC FLOWS AND FLOW BRECCIAS (#22)(MIOCENE)
Ts ₂₁	SEDIMENTARY ROCKS (#21)(MIOCENE)
Tv ₂₀	VOLCANIC FLOWS AND FLOW BRECCIAS (#20)(MIOCENE)
Tx ₁₉	SEDIMENTARY BRECCIA (#19)(MIOCENE)
Ta ₁₈	ANDESITIC VOLCANIC FLOWS (#18)(MIOCENE)
Tcg ₁₇	CONGLOMERATE (#17)(MIOCENE)
Ta ₁₆	ANDESITIC VOLCANIC FLOWS (#16)(MIOCENE)
Tcg ₁₅	CONGLOMERATE (#15)(MIOCENE)
Ta ₁₄	ANDESITIC VOLCANIC FLOWS (#14)(MIOCENE)
Tl ₁₃	LIMESTONE (#13)(MIOCENE)
Txv ₁₂	SEDIMENTARY BRECCIA (#12)(MIOCENE)
Tl ₁₁	LIMESTONE (#11)(MIOCENE)

Tt ₁₀	TUFF (#10)(MIOCENE)
Tl ₉	LIMESTONE (#9)(MIOCENE)
Txv ₈	SEDIMENTARY BRECCIA (#8)(MIOCENE)
Tl ₇	LIMESTONE (#7)(MIOCENE)
Tt ₆	TUFF (#6)(MIOCENE)
Tl ₅	LIMESTONE (#5)(MIOCENE)
Tt ₅	TUFF (#5)(MIOCENE)
Ts ₁₄	SANDSTONE, SILTSTONE, AND LIMESTONE (#4)(MIOCENE)
Tt ₃	TUFF (#3)(MIOCENE)
Tss ₂	SANDSTONE (#2)(MIOCENE TO UPPER OLIGOCENE(?))
Tbs ₁	BASAL SANDSTONE (#1)(MIOCENE TO UPPER OLIGOCENE(?))
Ts	SEDIMENTARY ROCKS (MIOCENE)
Tv	VOLCANIC ROCKS (MIOCENE)
Tdfv	DEBRIS FLOWS (MIOCENE)
Txgr	SEDIMENTARY BRECCIA, GRANITIC PROTOLITH (MIOCENE)
Txv	SEDIMENTARY BRECCIA, VOLCANIC PROTOLITH (MIOCENE)
Ta	ANDESITIC VOLCANIC FLOWS (MIOCENE)
Tcg	CONGLOMERATE (MIOCENE)
Tsu	SEDIMENTARY ROCKS, UNDIVIDED (MIOCENE)
Txvu	SEDIMENTARY BRECCIA, UNDIVIDED (MIOCENE)
Tlu	LIMESTONE, UNDIVIDED (MIOCENE)
Tc	HYDROTHERMAL CARBONATE (MIOCENE)
Tm	MAFIC DIKE (MIOCENE)
Mzb	BUCKSKIN FORMATION (MESOZOIC)
Mzp	PHYLLITE (MESOZOIC)
Mzsc	SANDSTONE AND CONGLOMERATE (MESOZOIC)
Mzsh	SCHIST (MESOZOIC)
Pk	KAIBAB LIMESTONE (PERMIAN)
Pc	COCONINO SANDSTONE (PERMIAN)
PIPs	SUPAI GROUP (PENNSYLVANIAN AND PERMIAN)
Pzc	CARBONATE ROCKS, UNDIVIDED (PALEOZOIC)
Pzcc	CALCITE MARBLE (PALEOZOIC)
Pzcd	DOLOMITE MARBLE (PALEOZOIC)
Mzyi	MAFIC INTRUSIVE ROCKS (PROTEROZOIC OR MESOZOIC)
Mzyid	DIORITIC INTRUSIVE ROCKS (PROTEROZOIC OR MESOZOIC)

JXg	GRANITIC ROCKS (PROTEROZOIC?)
gr ₁	GRANITOID (#1)(MESOZOIC?)
gr ₂	GRANITOID (#2)(MESOZOIC?)
	Lower-Plate Unit
mc	MYLONITIC CRYSTALLINE ROCKS (PROTEROZOIC TO CENOZOIC)

MAP SYMBOLS

	CONTACT -- Depositional or intrusive, dashed where approximately located.
	HIGH-ANGLE (GREATER THAN 35 DEGREES) NORMAL FAULT, SHOWING DIP AND TREND OF SLICKENSIDE LINEATIONS ON FAULT SURFACE -- Dashed where inferred, dotted where concealed. Bar and ball on hangingwall block.
	HIGH-ANGLE (GREATER THAN 35 DEGREES) FAULT, SHOWING DIP -- Dashed where inferred, dotted where concealed.
	BUCKSKIN-RAWHIDE DETACHMENT FAULT, SHOWING DIP -- Dashed where inferred, dotted where concealed. Double hatchures on upper plate.
	LOW-ANGLE (LESS THAN 35 DEGREES) NORMAL FAULT -- Dashed where inferred, dotted where concealed. Single hatchures on upper plate.
	THRUST OR REVERSE FAULT, SHOWING DIP -- Dashed where inferred, dotted where concealed. Teeth on hanging-wall block.
	STRIKE AND DIP OF BEDDING
	STRIKE OF VERTICAL BEDDING
	STRIKE AND DIP OF METAMORPHIC FOLIATION -- Locally includes mylonitic foliation and cleavage.
	STRIKE OF VERTICAL METAMORPHIC FOLIATION -- Locally includes mylonitic foliation and cleavage.
	STRIKE AND DIP OF METAMORPHIC FOLIATION AND PARALLEL CLEAVAGE
	ANTICLINE OR ANTIFORMAL SYNCLINE -- Direction of plunge indicated, dotted where trace of axis is concealed.
	SYNCLINE OR SYNFORMAL ANTICLINE -- Direction of plunge indicated, dotted where trace of axis is concealed.
	CARBONATE MARKER BED
	TUFF MARKER BED
	QUARTZITE MARKER BED
	LEADER CONNECTING AREAS OF SAME ROCK UNIT
	TREND OF STRIATIONS IN ROCKS NEAR OR ALONG FAULT SURFACE
	K-Ar SAMPLE LOCALITY AND NUMBER
	COBBLE-COUNT LOCALITY AND NUMBER
	MINE DUMP
	DRILL-HOLE LOCATION (From Wilkins and Heidrick, 1982)