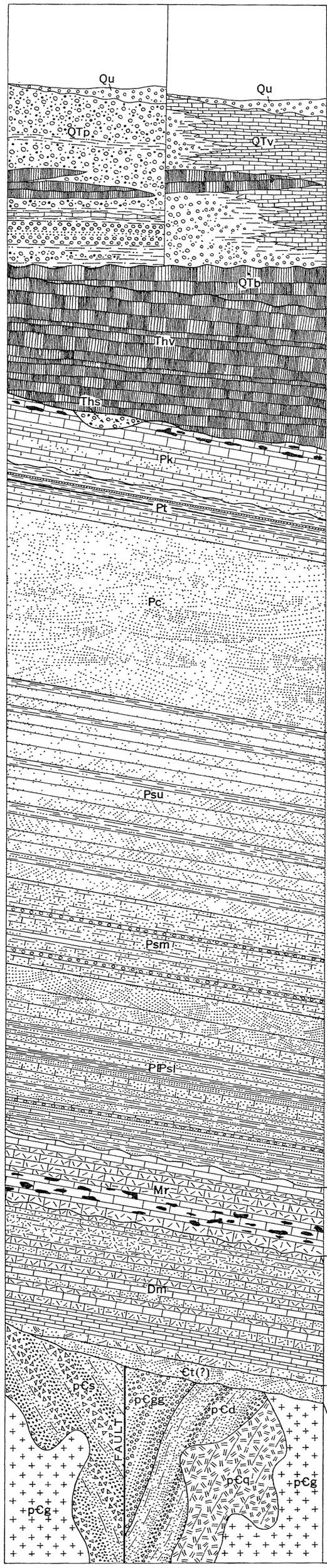

AGE	FORMATION		THICKNESS, IN FEET	GENERAL DESCRIPTION AND REMARKS
Recent and Pleistocene	Pediment gravels, terrace deposits, and riverwash Qu		0–30+ each type deposit	Gravel veneer on pediment surfaces; gravel, sand, and silt as terraces; and coarse gravel and sand in stream channels. All deposits unconsolidated except where locally cemented by caliche
	UNCONFORMITY			
Pleistocene(?) to Pliocene(?)	Perkinsville formation QTp	Verde formation QTv	0–500 QTp | 0–2000+ QTv	QTp, coarse to fine gravel, sand and silt intercalated with basalt flows. Clastic sediments are in part water-laid and contain some fresh-water limestone; QTv, coarse gravel, sand, and silt marginal to and interfingering with lakebeds which consist of limestone, siltstone, and clay. Basalt flows intercalated within this sequence of deposits. Although the mutual relationship of the Perkinsville formation with the Verde formation is not demonstrated in the quadrangle, they are tentatively correlated with each other
	UNCONFORMITY			
	Intermediate basalt QTb		50–150+	Locally extruded olivine basalt in flows about 50 feet thick
	UNCONFORMITY			
Pliocene(?)	Hickey formation	Volcanic rocks Thv	0–1400	Chiefly olivine basalt as massive flows and flow breccias which are in part scoriaceous. Locally includes biotite- and hornblende-bearing andesites. Minor amounts of tuffaceous and basaltic sediments intercalated between flows. Basalt dikes are associated with the thick lava sequence and contributed flow material by fissure activity
		Sedimentary rocks Ths	0–200	Coarse to fine gravel, which consists chiefly of Precambrian and Paleozoic rock types and minor amounts of basaltic fragments, is relic of former stream deposits confined to channels beneath the thick sequence of overlying lava
	UNCONFORMITY			
Permian	Kaibab limestone Pk		250±	White to gray rather thin-bedded crystalline but sandy limestone that alternates with sandstone; contains bedded chert. Basal part contains buff to yellow sandstone unit which grades upward into the white arenaceous limestone and sandstone. Formation becomes less arenaceous upward. Forms series of cliffs and ledges
	UNCONFORMITY			
	Toroweap formation Pt		150–165	Lower part is reworked Coconino sandstone which grades upward into a ledge-forming massive calcareous sandstone or arenaceous limestone about 50 feet thick. A sequence of redbeds, which consists of sandstone, siltstone, and shale, is intercalated with clean white sandstone, and comprises the upper half of the formation. The formation forms a slope except for above mentioned unit
	Coconino sandstone Pc		500–650	Massive pale-orange to grayish orange sandstone of fine and even grain, which is characterized by crossbedding on a large scale. The formation nearly everywhere forms a sheer cliff
Permian and Pennsylvanian (Carboniferous)	Supai formation	Upper member Psu	650–750	Chiefly strongly crossbedded medium- to coarse-grained reddish-orange sandstone units separated by horizontally bedded but very thinly laminated fine-grained pale-reddish-brown sandstone and siltstone. Member as a whole forms cliffs, buttresses, and pinacles
		Middle member Psm	250–300	Chiefly pale-red to grayish-red siltstone, somewhat calcareous and interbedded with conglomerate and orange cross-laminated sandstone. Member is very irregularly and thinly bedded. Siltstone weathers to thin irregular slabs and chips which form a subdued topography
		Lower member PIPsl	580–625	Lower third of member is particularly thin bedded and consists of shale, siltstone, and sandstone of various shades of red; generally 2 or 3 gray limestone beds are intercalated near the base. Member becomes thicker bedded upward with less shale content. Top of member contains pale-red to pink crossbedded sandstone unit 70–90 feet thick. Member forms a moderate steplike slope which becomes increasing steeper upward
	UNCONFORMITY			
Lower Mississippian (Carboniferous)	Redwall limestone Mr		235–285	Lower part consists of thin-bedded reworked Devonian materials and a bluish-gray oolitic limestone 25–55 feet thick, above which is a fine-grained cherty limestone 55–80 feet thick that passes upward into a coarsely crystalline noncherty limestone unit 100 feet thick. At top of formation is a dense bluish-gray micro-oolitic limestone unit that averages 40 feet thick
	UNCONFORMITY			
Upper and Middle(?) Devonian	Martin limestone Dm		440–480	The lower unit of the formation is a 20–50 foot crossbedded impure clastic dolomitic limestone overlain by 80–110 feet of light-gray thin-bedded lithographic limestone. Above this is 65–80 feet of thicker bedded mottled dark-gray dolomitic limestone. The upper 247–289 feet of the formation consist of alternating coarsely crystalline dolomitic limestone, lithographic limestone, siltstone, and some shale and sandstone. The formation is characteristically thin bedded and has a general overall dark-gray appearance. It weathers with a moderate to steep slope of receding ledges
	UNCONFORMITY			
Cambrian(?)	Tapeats(?) sandstone €t(?)		0–60+	Comprises two units: a lower unit of dark-reddish-brown crossbedded sandstone that averages 50 feet thick; an upper unit of reddish- to yellowish-gray shaly siltstone and mudstone that is 10–15 feet thick
	UNCONFORMITY			
Older Precambrian rocks	Older Precambrian rocks p€g; p€q; p€gg: p€d; p€s		?	p€g, gabbro; p€q, quartz porphyry; p€gg, Grapevine Gulch formation, largely fine-grained tuffaceous sediments; p€d, Deception rhyolite, largely bedded sedimentary rocks of rhyolitic composition; p€s, Spud Mountain volcanics, includes andesitic breccia, and tuffaceous sedimentary rocks of rhyolitic and andesitic composition. The Spud Mountain volcanics are in fault contact with the Grapevine Gulch formation and the Deception rhyolite. Their age relation is not known

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STRATIGRAPHIC SECTION OF THE ROCKS IN THE CLARKDALE QUADRANGLE, ARIZONA