TABLE 1. ROCKS OF THE CENTRAL PELONCILLO MOUNTAINS

Intrusive rocks	Age	Sedimentary and extrusive rocks (layered rocks)		
		Rock unit	Lithology	Thickness (feet)
	Quaternary	Animas Valley basalt	Dark-gray to black fine-grained vesicular olivine basalt	0-60
		Alluvial and lacustrine deposits	Includes older alluvial deposits of poorly sorted coarse gravel upon which a hilly topography is developed; lake beds of interbedded fine sand and clay estimated to be 10-20 feet thick; and younger alluvial deposits of unsorted and unconsolidated sand and gravel on the lower slopes of the mountains and in parts of Animas and San Simon Valleys	
Rhyolite dikes	Tertiary	Weatherby Canyon ignimbrite	Rhyolite and some trachyte ignimbrite and thin interbeds of nonwelded tuff. Most of the ignimbrite is a light-gray to red, hard, compact, aphanitic-porphyritic rhyolite, with phenocrysts of quartz, sanidine, and orthoclase in a devitrified matrix of shards and glass shreds. Numerous elongated lenticular cavities impart a eutaxitic structure to the ignimbrite. Microscopic examination shows that the finer particles are also alined parallel to the bedding. The ignimbrite is confined to the area south of Cowboy Pass	3,000+
Quartz latite dikes and plug		Vanar Hills volcanic rocks	Flows, vitric tuffs, crystal tuffs, and pitchstone; pinkish-gray latitic rocks, with phenocrysts of feldspar and biotite in a hypocrystalline groundmass. Similar to the intrusive latite porphyry	
Latite porphyry sills and dikes		Steins Mountain quartz latite porphyry	Columnar jointed flows and devitrified tuffs which form the upper part of Steins Mountain and adjacent hills. The rock is pinkish-gray porphyritic-aphanitic, with quartz and feldspar phenocrysts and numerous lithic and vitric fragments, many of which are flattened and elongated, imparting a eutaxitic structure to the rock	
Rhyolite, latite, and monzonite porphyry dikes, sills, and plugs		Basalt	Dark-gray to black, fine-grained, holocrystalline, nonporphyritic; consisting wholly of andesine and magnetite. Occurs north of Steins	
		Quarry Peak rhyolite complex	Flows, breccias, and tuffs of rhyolite composition. In general the rock is light gray to white, with a few small inconspicuous quartz or feldspar megacrystals. Many of the breccias and tuffs are well bedded. Occurs north of the Southern Pacific Railroad and forms prominent Quarry Peak	1,000±
Quartz monzonite porphyry dikes and sills	?	Andesite	Dark-gray, red, and grayish-purple flows and breccias, most of which are fine grained, with small phenocrysts of epidotized feldspar and pyroxene. Epidote is very abundant in the rock. Some dacite and basalt are included in the sequence	5,000+
		Bobcat Hill conglomerate	**Interbedded impure volcanic arkose sandstone and conglomerate. The conglomerate is characterized by the presence of fragments of limestone and volcanic rocks. A 1-foot bed of limestone, which in places consists entirely of algal remains, occurs near the base of the formation in the eastern part of the outcrop area**	**720-1,140**
		Quartz latite	A holocrystalline equigranular fine-grained to aphanitic gray to brown rock, with small phenocrysts of quartz, feldspar, and biotite, and lithic fragments. Flow structures are present in the upper part	
Cienega Peak granite	Cretaceous	Johnny Bull sandstone	Interbedded light-colored fine-grained well-sorted well-cemented orthoquartzite, dark grayish-brown fine-grained well-cemented subgraywacke, and brown shale	1,047+
		Still Ridge formation	Silty and sandy limestone, sandstone, calcareous sandstone, and limestone pebble conglomerate. The limestone pebble conglomerate, which is prominent in the sequence, consists of black limestone pebbles which weather light gray, in a dark-gray to black limestone matrix which weathers brown. Interbedded volcanic rocks	575-650
		Carbonate Hill limestone	Medium-gray thin-bedded sandy calcarenite with prominent beds, 8-10 feet thick, consisting almost wholly of pelecypod shells. Pelecypods, gastropods, and ammonites are common	200+
		McGhee Peak formation	Alternating beds of conglomerate, shale, sandstone, and limestone. The conglomerate contains limestone fragments but no volcanic rock fragments	470-600
	Permian	Chiricahua limestone	Thick-bedded light-gray medium-grained limestone containing abundant irregularly shaped grayish-pink nodules of chert. Very fossiliferous	800+
		Scherrer formation	Thick-bedded well-cemented dusky-red siltstone	0-50(?)
		Colina limestone	Mostly dark-gray to black very fine-grained limestone with calcite segregations which are probably recrystallized fossils. No chert. Large gastropods and scaphopods are characteristic. A few siltstone beds	500+
		Earp formation	The lower part consists of alternating beds of limestone, siltstone, and sandstone, with some shale. The upper part is dominantly limestone, with some beds of dolomite near the top. Fusulinids are abundant	831+
		Horquilla limestone	**Thin- and thick-bedded dark- and light-gray limestone with abundant fusulinids, except in the lowermost part. Pinkish-gray and black chert are common.**	**1,350-1,500**
	Pennsylvanian			
	Mississippian	Paradise formation	**Alternating beds of black, gray, and brown limestone, oolitic limestone and calcarenite, calcareous sandstone, and conglomerate. Fossils are abundant**	**217**
		Escabrosa limestone	Lower member mostly thin-bedded to medium-bedded light-gray limestone, with some thin shale interbeds and some beds of dark-gray limestone, about 100 feet thick. Middle member consists of dark-gray to black fine-grained limestone, with abundant black chert in nodules and layers. Crinoidal remains are abundant. This member about 250 feet thick. Upper member is light-gray crinoidal limestone, 113 feet thick, with gray and pinkish chert	460±
		Percha shale	Black fissile shale near the base overlain by interbedded calcareous gray shale and thin-bedded limestone. Limestone content increases upward. In much of the area the calcareous shales and limestones are metamorphosed to light-gray siliceous hornfels	235±
	Devonian			
	Ordovician	Montoya limestone	Medium- to dark-gray dolomite, with about 30 feet of alternating dolomite and black chert in beds 2-6 in. thick	0-100±
		El Paso limestone	Lower part consists of medium-bedded light-gray dolomite, with pink and black chert. The upper part consists of about 130 feet of very thin-bedded gray limestone and thin irregular interbeds of black chert, a fraction of an inch thick. The laminated beds have a wavy or crinkly appearance	550±
	Cambrian	Bolsa quartzite	Arkosic and orthoquartzitic sandstone and conglomerate containing some glauconite and thin shale beds in the middle part of the unit	60-400
Granite Gap granite	Precambrian			