

Formations of the Goodsprings quadrangle, Nevada

Exposed in Goodsprings quadrangle

Age classification	Formation	Member	Character	Thickness (feet)
Recent.	Alluvium.		Unconsolidated mud, sand, coarse gravel, and boulders of local origin.	
	Lower (later) gravel.		Cemented sand and gravel of local origin on the hills west of Goodsprings.	50-100
Pleistocene.	Higher (earlier) gravel.		Unconsolidated sand, coarse gravel, and boulders, largely from remote source but partly local.	50-125
Tertiary (Miocene?) <i>in Tertiary granite porphyry</i>	Volcanic rocks.		Tuffs, breccia, and flows of latite, andesite, rhyolite, and basalt.	0-200
Jurassic (?)	Aztec sandstone.		Massive ledge of reddish or buff sandstone, minutely cross-bedded.	2, 100
Upper Triassic.	Chinle formation.		Reddish shaly sandstone and shale with several beds of chert and limestone conglomerate.	1, 000 ±
Upper (?) Triassic.	Shinarump conglomerate.		One or two beds of limestone and chert conglomerate separated by sandy shale.	10-30
Lower Triassic.	Moenkopi formation.		Thin-bedded buff limestone underlain by green and red shale and conglomerate and overlain by red sandy shale. Tuff and conglomerate of igneous pebbles overlie the limestone member 2 miles west of Goodsprings.	750-950
	Unconformity			
	Kaibab limestone.		Two massive ledges of gray limestone separated by 20 to 30 feet of buff to red shale and sandstone.	410-555+
Permian.	Supai formation.		Reddish sandstone separating red and greenish shaly sandstone below from red gypsum-bearing shaly sandstone above.	1, 000-1, 100
Pennsylvanian.	Bird Spring formation.		Gray limestone and dolomite in beds ranging in thickness from thinnest laminae to 60 feet, separated by shale and sandstone. From Goodsprings northward a conglomeratic sandstone at base.	2, 500 ±
	Unconformity			
Mississippian (middle and lower).	Monte Cristo limestone.	Yellowpine limestone.	Several beds of dark-gray limestone that locally weather as a massive ledge. In places completely altered to dolomite.	60-120
		Arrowhead limestone.	Thin-bedded blue and gray limestone alternating with gray shale; highly fossiliferous; no chert.	10-20
		Bullion dolomite.	Massive light-gray limestone, now largely altered to cream-colored and white dolomite; chert uncommon.	185-300
Mississippian (middle and lower).	Monte Cristo limestone.	Anchor limestone.	Massive gray limestone with numerous thin chert layers; in places large belts are altered to dolomite; numerous fossils.	65-400
		Dawn limestone.	Thin-bedded dark-gray limestone; little chert; in large part of area altered to dolomite; numerous fossils.	60-400
		Crystal Pass limestone.	Very thin-bedded light-gray limestone; no fossils or chert.	150-260
Devonian.	Sultan limestone.	Valentine limestone.	Light-gray limestone and dolomite; numerous fossils.	75-380
		Ironside dolomite.	Dark-gray to black dolomite, in beds 2 to 5 feet thick; few fossils.	5-125
Devonian (?) to Upper Cambrian.	Goodsprings dolomite.		Thin-bedded light and dark gray mottled dolomite, with some magnesian limestone and locally near top 50 to 75 feet of dolomitic and sandy shale; very few fossils.	2, 450 ±

Not exposed in Goodsprings quadrangle

Middle Cambrian.	Bright Angel shale.		Green micaceous shale and brownish sandstone; contains trails but few fossils.	240 ±
	Tapeats sandstone.		Brownish sandstone, thin bedded.	130 ±
Algonkian.			Conglomerate, quartzite, and dolomite exposed in Kingston Mountains and possibly present beneath the Paleozoic rocks of the western part of the Goodsprings quadrangle.	
Archean.			Reddish granite gneiss.	

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WET

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