

Table 1.—Description of

Erathean System Series	Geologic unit	General lithology
	Permian Lower Permian	Cutler Formation--Continued
Rico Formation (310RICO)		Gray thin- to thick-bedded fossiliferous, cherty limestone; reddish-brown or greenish-gray fine- to medium-grained sandstone; reddish brown, gray-green, or pale red-purple micaceous or partly gypsiferous siltstone.
Pennsylvanian (320PSIV) Middle and Upper Pennsylvanian	Hermosa Formation (324HRMS)	Upper member--Blue to gray thin- to thick-bedded fossiliferous limestone; gray fine-grained, micaceous sandstone and siltstone; gray arkose and conglomerate.
		Paradox Member (324PRDX)--upper unit--buff arkosic granulate, greenish-gray sandy siltstone; interbedded black shale, dark-gray siltstone, gypsum and dolomite. Middle unit--salt, gypsum, anhydrite, black shale, gray sandstone, and limestone. Lower unit--similar to upper unit.
		Unnamed member--Limestone with interbedded light to dark gray silty shale.
	Molas Formation	Variiegated to reddish-brown siltstone, red silty shale, calcareous sandstone; some gray to reddish-brown thin bedded limestone.
Mississippian (330MESP)	Redwall (Leadville) Limestone (330LDWL)	Upper part--tan, brown, gray, or pink cherty massive dolomite; thin beds of limestone. Lower part--light-colored, sometimes oolitic, dense limestone.
	Ouray Limestone (341OURY)	Light gray to tan, dense, often oolitic limestone; some green shale partings.
Devonian (340DEVN)	Elbert Formation	Sandy, thin-bedded dolomite; with streaks of gray-green and red sandy shale.
	Devonian (undivided)	Upper unit--Sandstone, grading to dolomite to west and northwest.
		Lower unit (341ANIH)--Known as the Aneth Formation in the oil industry. Dark brown to black argillaceous and calcareous shale. Sometimes anhydritric and glauconitic.
Cambrian	Muzv Limestone	Massive limestone with green shale locally.
	Bright Angel Shale	Interbedded fine-grained sandstone and siltstone; green, red, and gray shale; and limestone and dolomite.
	Tapeats Sandstone	Sandstone
	Pre-Cambrian	Undifferentiated

<sup>1</sup>The ranges of permeability are defined as follows (Hood and Patterson, 1984, p.6):

Range	Permeability, in feet per day
Very low	Less than 0.5
Low	0.5 to 5
Moderate	5 to 50
High	50 to 500
Very high	More than 500

geologic units--Continued

Thickness and areal extent	Water-bearing <sup>1</sup> characteristics	Aquifer system
Thickness 175 to 480 feet, thins northwestward.	Very low permeability. The P aquifer generally exists north of the San Juan River and the C aquifer generally exists south of the San Juan River. Water-table conditions exist in the P aquifer west of Comb monocline.	
Thickness about 300 feet.	This and all underlying formations contain saline to briny water.	
Maximum thickness is 1,800 feet.		
Thickness commonly 500 to 2,500 feet; thickens to the northeast. Thickness as much as 11,000 feet in salt intrusives.		
This member and underlying formations are not exposed in area. Combined thickness of these two units is 100 to 300 feet.		
300 to 500 feet thick		
Thickness about 100 feet.		
100 to 300 feet thick		
50 to 100 feet thick		
0 to 200 feet thick		
Combined thickness 200 to 1,000 feet.		