

Table 1.—Description of

| Stratigraphic System Series | Geologic unit | General lithology |
|---------------------------------|--|---|
| MESOZOIC (200MSZC) Triassic | Chinle Formation (231CHNL) | Varicolored, red, reddish-brown, and orange-red siltstone interbedded with lenses of red sandstone and shale, limestone-pebble and shale-pellet conglomerate; with lenses of grit and quartz-pebble conglomerate near base. Also, bentonitic mudstone, predominately in the lower four members. |
| | | Upper members—limy and tuffaceous mudstone, shale, and some shaly sandstone. |
| | | Lower members—varicolored, gray, brown, pale orange, greenish-yellow, gray-orange-pink, or pale yellowish-green calcareous, sandstone or conglomeritic sandstone with chert and limestone pebbles; some interbedded red, purplish, and gray-green mudstone. |
| L and M (?) Triassic | Moenkopi Formation | Upper part—brown and reddish-brown, even-bedded shaly siltstone, thin flaggy sandstone and thick massive beds of sandstone. |
| | | Lower part (Hoskinnini Member)—interbedded thin commonly contorted beds of reddish-brown, fine-grained silty sandstone and dark-reddish brown shaly siltstone. Some gypsum beds locally. |
| PALEOZOIC Permian Lower Permian | Cutler Formation (undifferentiated) (310CLR) | Generally, grayish-red to purple, reddish-orange micaceous arkosic sandstone, siltstone, and conglomerate. |
| | | White Rim Sandstone Member—White, gray, and buff medium- to coarse-grained quartzose sandstone. |
| | | De Chelly Sandstone Member (310DLL)—Light brown to pale reddish-brown fine-grained quartz sandstone. |
| | | Organ Rock Tongue Member—Reddish-brown even-bedded siltstone with some thin-bedded, fine-grained sandstone. |
| | | Cedar Mesa Sandstone Member (310CDM)—Yellowish-gray, reddish-orange, and reddish-brown fine- to coarse-grained sandstone. Thinner beds of dusky red siltstone. South of Blanding grades into evaporite, banded gray-green and maroon gypsiferous siltstone, silty shale, and friable sandstone. |

geologic units—Continued

| Thickness and areal extent | Water-bearing ¹ characteristics | Aquifer system |
|---|--|----------------|
| Forms a conspicuous slope below the Wingate Sandstone. Maximum thickness is 1,400 feet; thins northward. | Very low permeability. It is the confining bed between the N and P (or C) aquifers. Ore-bearing units yield large quantities of water to uranium mines in the La Sal area. | |
| Church Rock Member—Maximum thickness is 400 feet. | | |
| Owl Rock Member—Maximum thickness is 450 feet; averages 200 feet. | | |
| Petrified Forest Member—Thickness south of Moab about 500 feet; thins to zero along a northwest-trending line through the confluence of the Colorado and Green Rivers. | | |
| Mossback Member—Thickness averages 60 feet but can be as much as 150 feet where it fills channels in underlying surface. | | |
| Monitor Butte Member—Present south of northwest-trending line through Monticello. Maximum thickness is 250 feet; average thickness is 100-150 feet. | | |
| Shinarump Member—Present south of a northwest-trending line from north of Bluff to southeast corner of area. Maximum thickness is 225 feet; average thickness is 50 feet. | Locally may yield small amounts of water. | |
| This formation and underlying formations down to the Paradox Member of the Hermosa Formation exposed only in the area west of a line extending north along Comb monocline, except for an eroded window resulting from the breached Lisbon anticline. Maximum thickness is 350 feet; thins to zero east of Comb monocline. | | |
| This arkosic facies is present in western Colorado and is differentiated into the member units southwestward along a north-northwestward-trending line through Monticello. | 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. Local flow systems under water-table conditions exist in the P aquifer west of Comb monocline. | P aquifer |
| Present only in northwestern part of area. | | C aquifer |
| Thins northward from 400 feet to zero on a northwest-trending line through Blanding. | | |
| Thins northward from 650 feet to 250 feet near the Abajo Mountains. | | |
| Thins radially outward from 1,200 feet in an area northwest of the Abajo Mountains to about 100 feet before it grades into other facies. | | P aquifer |
| This and all underlying formations contain saline to briny water. | | |