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Table 1.--Description of geologic units known to underlie parts of the lower Dirty Devil River basin area--Continued

Erathem	System	Series	Geologic unit	Character of material	Hydrologic characteristics
PALEOZOIC (300PLZC)	Mississippian (330MSSP)	Equivalent of Redwall Limestone (330RDLL)	Terms used by various petroleum companies Redwall Limestone (330RDLL) Leadville Limestone (330LDVL) Madison Limestone or Group (330MDSN)	Mainly limestone and dolomite. Upper surface has karst topography and some internal zones are locally(?) cavernous. 200(?) to about 1,150 feet thick at wells in area. Thins across San Rafael Swell. (See also Cooper, 1955, p. 63, 65.)	Very low to high(?) permeability. Most of formation should be of very low permeability, but where solution of limestone and dolomite has created cavernous zones, permeability may be high. Almost all petroleum-test wells that penetrated and were tested in these rocks recovered relatively large amounts of water. Well (D-26-17)5ccc-1 flowed during testing. Water samples recovered from wells nearest the western boundary of the study area and San Rafael Swell were slightly to very saline of the sodium sulfate, magnesium chloride, and sodium calcium chloride types. The remaining samples were moderately saline to briny and are of the sodium chloride or sodium magnesium chloride type.
	Devonian (340DVNN)	Upper Devonian Pinyon Peak Limestone (no code) (westward equivalent) Eastward equivalents(?) reported by petroleum companies	Ouray Limestone (341OURY)	Massive dense argillaceous limestone and thin clayey shale; locally sandy, with sandstone. Thickness reported from wells in area ranges from about 90 to about 400 feet.	Very low(?) permeability. No water-quality data.
			Elbert Formation (341ELBR)	Limestone, shale, and (?) basal sandstone. Thickness reported for wells in area ranges from 260 to about 850 feet.	Very low(?) permeability. Water sample from well (D-26-7)19bbd-1 contained moderately saline water of the sodium sulfate type. The petroleum-test well was sampled across the Elbert-Lynch contact.
	Cambrian (370CHBR)	Upper Cambrian	Lynch Dolomite (371LYNC)	Chiefly dolomite and limestone. About 500 feet thick.	Very low(?) permeability. Water quality assumed to be similar to that in Elbert Formation.
		Middle Cambrian	— — — — —	— — — — —	— — — — —
			Ophir Shale (374OPHR)	Micaceous(?) shale and dark limestone. 600 to 700 feet thick.	Very low permeability. No water-quality data.
		Lower Cambrian	— — — — —	— — — — —	— — — — —
			Tintic Quartzite (374TNTC)	Mainly reddish quartzite or quartzitic sandstone, some (?)siltstone and (?)conglomerate. About 200 feet thick.	Very low(?) permeability. No water-quality data.
PRECAMBRIAN (400PCMB)			Precambrian (400PCMB)	Found at relatively shallow depths in San Rafael Swell. Two logs available for well (D-23-11) 27bbd-1; one log records "quartz biotite schist," the other records granite at 4,370 feet below land surface (Baker, 1946, p. 120). Rock undescribed but found at greater depths in wells (D-25-13)14bbc-1 and (D-25-14)22cdd-1 (table 8).	Do.

1/Term used by Bjorklund (1969, p. 15) for unconsolidated deposits in and near the adjacent upper Fremont River valley. This all-inclusive unit may contain equivalents to part, or all, of the Pleistocene and Holocene deposits described.