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Table 1.--Description of Permian rocks cropping out in southwestern Kansas.
(Geologic names as used by the Kansas Geological Survey in Moore and others, 1951)

Subdivision	Approximate thickness (feet)	Description		Salt water
		General lithology	Salt	
Taloga formation (Taloga formation, Fry Creek dolomite, and Whitehorse sandstone	Clark and Meade Counties, 300.	Red, fine-grained sandstone, shale, and siltstone. Few thin dolomite beds and gypsum stringers.	Salt was not reported in the well logs studied.	Lower part may contain salt water, especially where deeply buried.
Dog Creek shale	Barber County, 14-53.	Maroon, silty shale, siltstone, and very fine-grained sandstone. Thin beds of dolomite, dolomitic sandstone, and gypsum.	Data not sufficient to establish the presence of salt but it may be present locally in small amounts.	Contains salt water locally.
Blaine formation	Barber and Clark Counties, 50.	Massive beds of gypsum separated by red gypsiferous shales. Discontinuous thin dolomite beds underlie the gypsum beds.	Contains salt zones locally where deeply buried.	Contains salt water in some areas, particularly in the basal part. A small amount of salt water may seep from the Blaine into the Cimarron River in southwestern Comanche County.
Flowerpot shale	Barber and Clark Counties, 180.	Brownish-red, silty, gypsiferous shale and occasional thin, fine-grained sandstone. Formation characterized by numerous intersecting veins of satin spar and selenite crystals.	The shale is salty in many places and it contains bedded salt in many others, particularly west of Comanche County.	Salt water is widespread. A small amount of salt water may seep into the Cimarron River in southwestern Comanche County either directly or upward through the gypsum of the overlying Blaine formation.
Cedar Hills sandstone	Barber and Harper Counties, 180.	Alternating thin beds of red, very fine-grained sandstone and clayey siltstone, and red silty shale. Beds of white sandstone occur locally in upper and lower parts.	Contains salt locally.	Locally contains salt water especially where buried beneath permeable rocks. Small amounts of salt water may seep into alluvium along Salt Fork Arkansas River in Barber County.
Salt Plain formation	Harper County, 265?	Red, silty, flaky, gypsiferous shale and some siltstone and sandstone.	Salt occurs in many areas particularly west of Comanche County.	Contains salt water in many localities.
Harper sandstone	Harper County, 220.	Red and reddish-brown siltstone, very fine-grained sandstone, and some silty shale.	Probably contains salt locally.	Probably contains salt water, especially where deeply buried.
Sumner group (Stone Corral dolomite, Ninnescah shale, and the Wellington formation)	Ford County, 1,200.	Upper part: mostly brownish-red, silty, blocky dolomitic shale. Lower part: chiefly gray and green silty shale and some red shale. Beds of halite make up a significant part of the Wellington formation in the subsurface.	Massive beds of salt occur in much of western Kansas. The salt-bearing horizon attains a thickness of more than 700 feet in Clark County.	Contains salt water near the eastern margin of the salt zone in the central part of the state.