



EXPLANATION

- Qal**
Alluvium
Sand, silt, clay, and reworked gypsum and red beds. Generally above the zone of saturation. Contains water north of Major Johnson Springs, near Carlsbad, and in reworked material east of Fade-Away Ridge
- Qalc**
Alluvium and caliche cover
Thin beds of sand, silt, clay, and caliche. Above the zone of saturation
- Qlc**
Limestone conglomerate
Pebbles and cobbles of limestone and siliceous pebbles having calcareous matrix, cemented with calcium carbonate. Well indurated. Above the zone of saturation except in the alluvium north of Major Johnson Springs and near Carlsbad. Locally contains perched water
- Qqc**
Quartzose conglomerate
Pebbles of chert, quartzite, limestone, and igneous rocks having a siliceous sand matrix, cemented with calcium carbonate. Well indurated. Contains only perched water except in the alluvium north of Major Johnson Springs and near Carlsbad
- Pr**
Rustler Formation
Anhydrite, gypsum, red silt and clay and a conspicuous dolomite, the Culebra Dolomite Member. Contains water chiefly in solution channels in the Culebra Dolomite Member
- Pt**
Tansill Formation
Primarily thinly bedded dolomite in the carbonate facies and gypsum and red silt and clay in the evaporite facies. Contains water in solution channels in dolomite near the Capitan reef and in the area between Lake Avalon and Carlsbad Springs. Contains perched water in the evaporite facies in Dagger Draw
- Py**
Yates Formation
Alternating beds of fine-grained sandstone and dolomite in the carbonate facies. Gypsum, red silt and clay, and sandstone in the evaporite facies. Contains water near the Pecos River between Lake McMillan and Lake Avalon
- Pst**
Seven Rivers Formation
Dolomite containing a few sandy beds in the carbonate facies. Gypsum, anhydrite, and red silt and clay in the evaporite facies. Contains water in gypsiferous rocks north of Seven Rivers Hills and near Major Johnson Springs and may contain water in carbonate rocks near Rocky Arroyo. Contains a permeable aquifer in gypsum and dolomite between Lake McMillan and Major Johnson Springs
- Pq**
Queen Formation
Sandstone and alternating beds of dolomite and limestone. The upper part is gypsiferous in the subsurface near Major Johnson Springs. Contains water in solution channels in limestone and dolomite in the southern part of the artesian area north of Major Johnson Springs. Contains water in the Seven Rivers Embayment and the Guadalupe Mountains
- Contact**
Dashed where approximate
- Spring**

Base from U.S. Geological Survey quadrangles, 1961

Geology by E. R. Cox, 1955

GEOLOGIC MAP OF PART OF THE PECOS RIVER VALLEY BETWEEN LAKE MCMILLAN AND
CARLSBAD SPRINGS, EDDY COUNTY, NEW MEXICO

