Rustler Aquifer

The Rustler Formation of Permian age crops out in eastern Culberson County in the Trans-Pecos region of Texas and extends eastward into the subsurface of the Delaware Basin. The aquifer is principally located in Loving, Pecos, Reeves, and Ward counties where it yields water for irrigation, livestock, and water-flooding operations in oil-producing areas. High dissolved-solids concentrations render the water unsuitable for human consumption.

Water occurs in highly permeable solution zones that have developed in dolomite, limestone, and gypsum beds of the Rustler Formation. The dissolved-solids concentrations of the water increase downgradient, eastward into the basin, with a shift from sulfate to chloride as the predominant anion.

References