



Base from U.S. Geological Survey  
Roswell, 1962 and Corisbad, 1954  
Scale 1:250,000

Prepared by G. E. Welder, March 1971

EXPLANATION

3307  
o 3347  
Well

Basin boundary

Upper number is altitude of water level, in feet above mean sea level; lower number is altitude of land surface, in feet, from U.S. Geological Survey topographic maps. A solid circle (●) indicates that the well was flowing in January 1969. Data marked by "Q" are questionable. Table of well data available from the Water Resources Division, U.S. Geological Survey, Albuquerque, New Mexico, 87106.

3240 ———  
Potentiometric contour

Altitude to which water will rise in wells in the "principal artesian aquifer." Contour interval is 10 feet, except along west border of basin where the interval is 100 feet. Dashed where approximate.

All boundaries are approximate. The 3540-foot contour line approximates the west edge of the "principal artesian aquifer." Wells west of this line generally tap the Glorieta Sandstone and/or the Yeso Formation; although, the carbonate rock in the San Andres below the Hondo Sandstone member and above the Glorieta Sandstone might contain water locally.

Note: The "principal artesian aquifer" is composed of permeable zones that are mostly in carbonate rock of the San Andres Limestone and the Grayburg Formation. Ground water in the aquifer is under water-table and artesian conditions in the west and east parts of the basin, respectively.

MAP SHOWING THE POTENTIOMETRIC SURFACE OF THE "PRINCIPAL ARTESIAN AQUIFER" IN JANUARY 1969  
IN THE ROSWELL BASIN, CHAVES AND EDDY COUNTIES, NEW MEXICO