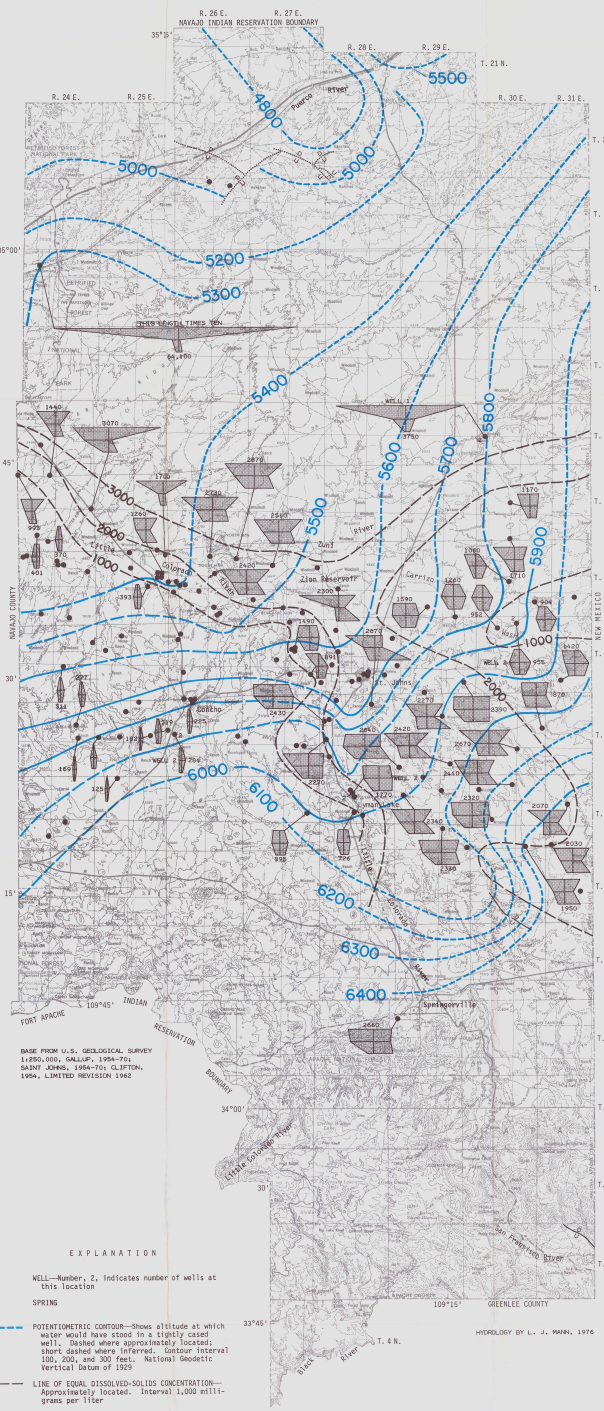
PREPARED BY THE U.S. GEOLOGICAL SURVEY IN COOPERATION
WITH THE ARIZONA DEPARTMENT OF WATER RESOURCES



BASE FROM U.S. GEOLOGICAL SURVEY
1:250,000, GALLUP, 1954-70; SAINT JOHNS, 1954-70; CLIFTON, 1954, LIMITED REVISION 1962

HYDROLOGY BY L. J. MANN, 1976

EXPLANATION

WELL—Number, 2, indicates number of wells at this location

SPRING

5000 POTENTIOMETRIC CONTOUR—Shows altitude at which water would have stood in a tightly cased well. Dashed where approximately located; short dashed where inferred. Contour interval 100, 200, and 300 feet. National Geodetic Vertical Datum of 1929

2000 LINE OF EQUAL DISSOLVED-SOLIDS CONCENTRATION—Approximately located. Interval 1,000 milligrams per liter

U D FAULT—Dashed where approximately located; dotted where concealed. U, upthrown side; D, downthrown side

CHEMICAL-QUALITY DIAGRAM—Shows major chemical constituents in milliequivalents per liter. The diagrams are in a variety of shapes and sizes, which provides a means of comparing, correlating, and characterizing types of water

Milliequivalents per liter

Cations: Sodium, Calcium, Magnesium

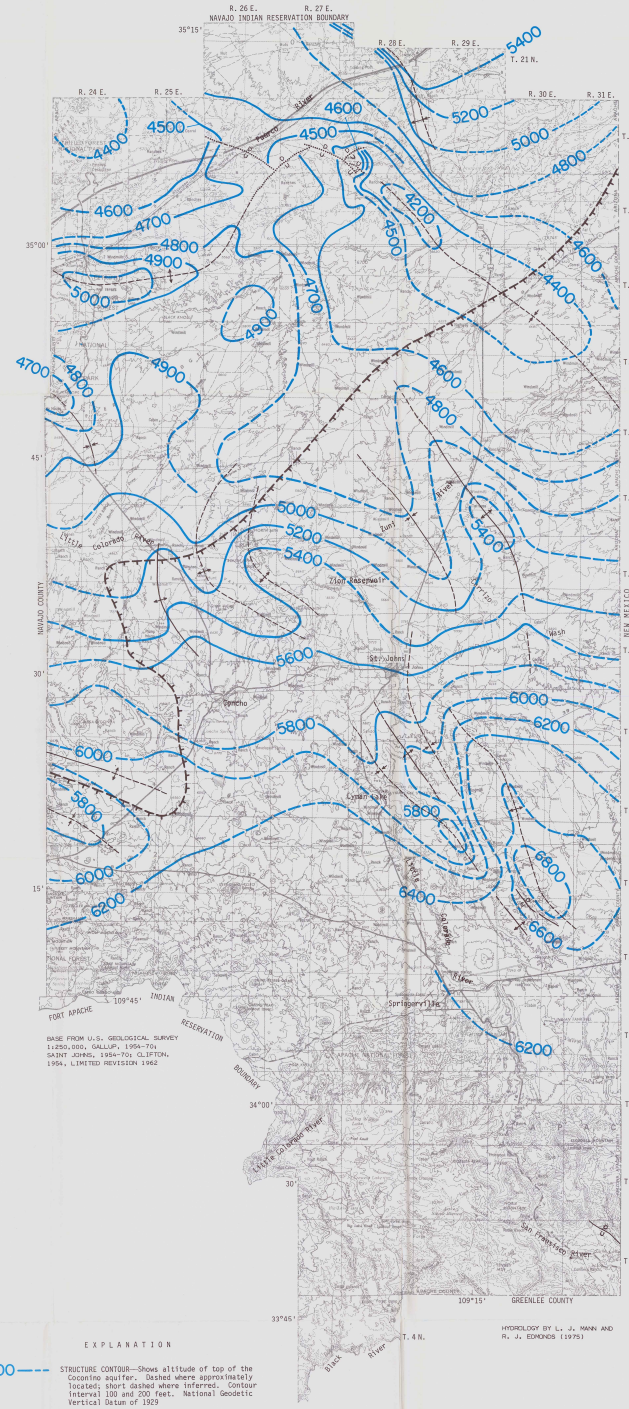
Anions: Chloride, Bicarbonate, Sulfate

50 30 10 0 10 30 50

2660

Number, 2660, indicates the dissolved-solids concentration in milligrams per liter

A. GROUND-WATER CONDITIONS IN THE COCONINO AQUIFER



BASE FROM U.S. GEOLOGICAL SURVEY
1:250,000, GALLUP, 1954-70; SAINT JOHNS, 1954-70; CLIFTON, 1954, LIMITED REVISION 1962

HYDROLOGY BY L. J. MANN AND R. J. EDMONDS (1975)

EXPLANATION

5000 STRUCTURE CONTOUR—Shows altitude of top of the Coconino aquifer. Dashed where approximately located; short dashed where inferred. Contour interval 100 and 200 feet. National Geodetic Vertical Datum of 1929

APPROXIMATE NORTHERN AND WESTERN LIMITS OF THE KAIBAB LIMESTONE

MAJOR ANTICLINE—Showing trace of crestal plane; dashed where approximately located

MAJOR SYNCLINE—Showing trace of trough plane; dashed where approximately located

MAJOR MONOCLINE—Showing trace of axial plane; dashed where approximately located

U D FAULT—Dashed where approximately located; dotted where concealed. U, upthrown side; D, downthrown side

B. ALTITUDE OF THE TOP OF THE COCONINO AQUIFER

6 0 5 10 15 20 MILES
5 0 5 10 15 20 25 30 KILOMETERS

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100-FOOT INTERVALS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

GROUND-WATER CONDITIONS AND THE ALTITUDE OF THE TOP OF THE COCONINO AQUIFER, 1975, IN SOUTHERN APACHE COUNTY, ARIZONA