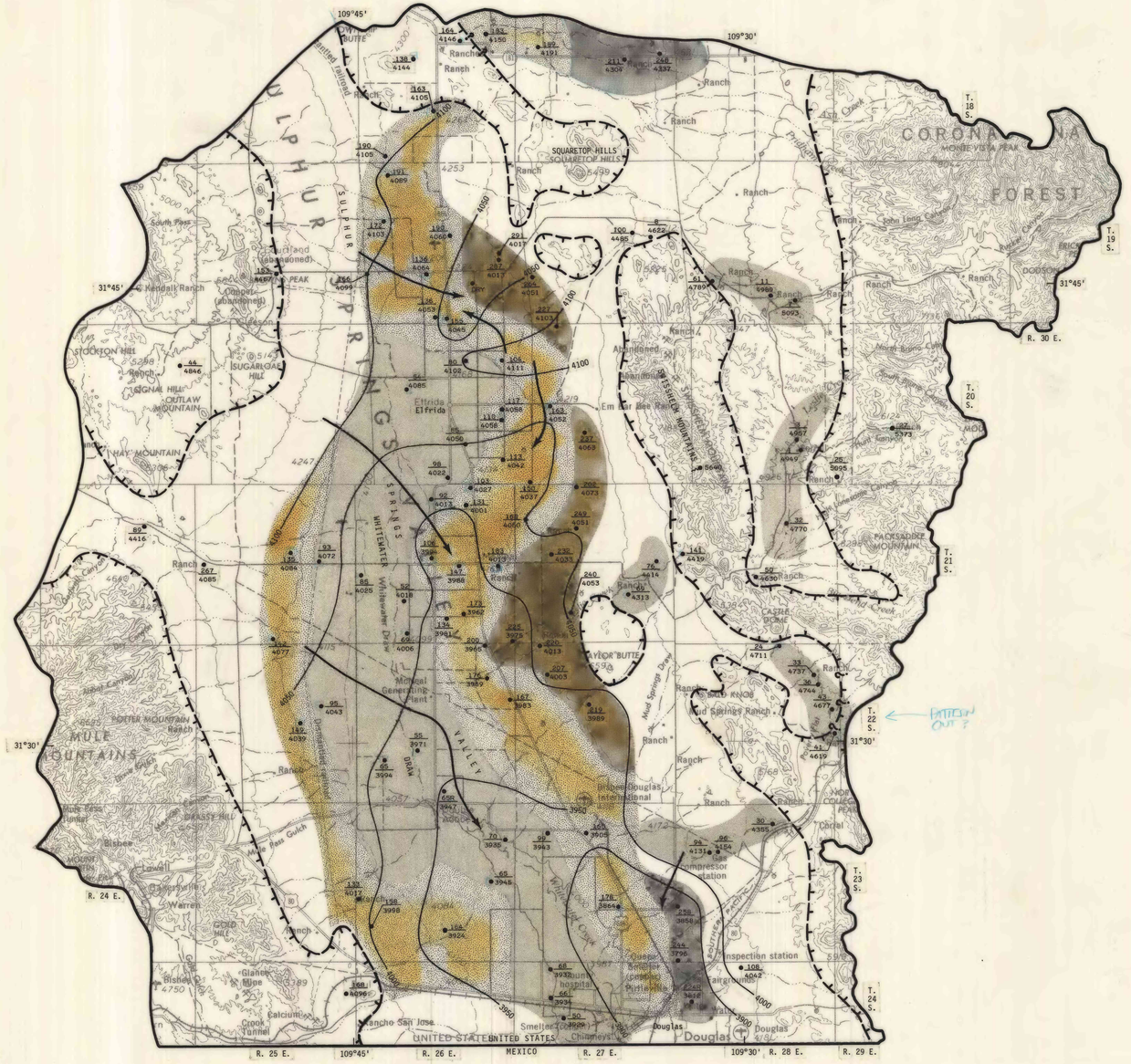
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE
ARIZONA WATER COMMISSION

WATER-RESOURCES INVESTIGATIONS
OPEN-FILE REPORT 80-700
SHEET 2 OF 3
DEPTH TO WATER AND ALTITUDE OF THE WATER LEVEL



EXPLANATION

DEPTH TO WATER, IN FEET BELOW LAND SURFACE

- Less than 100
- 100 to 200
- 200 to 300
- Insufficient data

4000 — WATER-LEVEL CONTOUR—Shows approximate altitude of the water level. Contour interval 50 and 100 feet. Datum is mean sea level

65R 3947 — WELL IN WHICH DEPTH TO WATER WAS MEASURED IN 1978—Upper number, 65R, is depth to water in feet below land surface (R, reported). Lower number, 3947, is altitude of the water level in feet above mean sea level

5640 — SPRING—Number, 5640, is altitude of the land surface in feet above mean sea level

APPROXIMATE BOUNDARY OF THE MAIN WATER-BEARING UNIT—The main water-bearing unit is principally alluvium, which consists of permeable lenses of gravel and sand interbedded with silt and clay. The igneous, metamorphic, and sedimentary rocks, which make up the surrounding mountains, yield less than 50 gallons per minute where fractured. Queried where uncertain

GENERALIZED DIRECTION OF GROUND-WATER FLOW

ARBITRARY BOUNDARY OF GROUND-WATER AREA

Prior to extensive ground-water withdrawals, the general direction of ground-water movement in the alluvium was from the mountain fronts to the center of Sulphur Springs Valley and southward into Mexico. In the northern part of the area large withdrawals for irrigation have caused a decline in the water table, which reversed the direction of movement; the water now moves toward the agricultural pumping center between Elfrida and the Squaretop Hills. Although the water table has declined between Elfrida and the international boundary, the general southward movement of ground water has not changed significantly.

5 0 5 MILES
5 0 5 10 KILOMETERS

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100-FOOT INTERVALS
DATUM IS MEAN SEA LEVEL

BASE FROM U.S. GEOLOGICAL SURVEY
DOUGLAS 1:250,000, 1959

DEPTH TO WATER AND ALTITUDE OF THE WATER LEVEL

MAPS SHOWING GROUND-WATER CONDITIONS IN THE DOUGLAS BASIN AREA, COCHISE COUNTY, ARIZONA—1978

BY
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