POTENTIOMETRIC SURFACE OF THE ALLUVIAL AQUIFER AND HYDROLOGIC CONDITIONS NEAR CAGUAS, PUERTO RICO, MARCH 1988

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The study area was delineated on the basis of geologic and hydrologic conditions. The alluvial aquifer extends over a large area, with a thickness ranging from 20 to 40 feet.

A survey of water levels was conducted on March 25, 1988. The objective of the survey was to determine the distribution of water levels and to evaluate the potential groundwater resources in the area. The survey was conducted using piezometers and groundwater wells.

The map shows the potentiometric surface of the alluvial aquifer, with contour lines indicating the water level. The map also includes information on the discharge of water from the aquifer to the nearby streams and the recharge from the streams to the aquifer.

Additional information is available from the U.S. Geological Survey.

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EXPLANATION

- POTENTIOMETRIC CONTOURS - Shown in feet of water level below mean sea level.
- REGULAR GROUNDWATER DIRECTION LINE - Arrows indicate the direction of flow of water in the aquifer.
- GEOLIGIC CONTOUR LINES - Contours in feet of water level below mean sea level.
- WELL USED FOR INDUSTRIAL WATER SUPPLY
- WELL USED FOR DOMESTIC WATER SUPPLY
- WELL USED FOR CARRY FARM WATER SUPPLY
- DEVELOPMENT WELLS
- GAGES STATION - Points where the water level is measured.
- STRENGTH OF STREAM DISCHARGE - Values in parentheses indicate the discharge in cubic feet per second.
- WEATHER STATION - Station for recording climate and atmospheric conditions.

FACTORS FOR CONVERTING INTERNATIONAL SYSTEM (SI) UNITS TO CONVENTIONAL UNITS:

- Multiply all units:
  - 1,000 cubic feet per second (cfs) = 36,000 cubic meters per second (m³/s)
- Divide all units:
  - 1 gallon per acre-foot (gaf) = 0.0001336 liters per day (l/d)
  - 1 foot per second (fps) = 0.3048 meters per second (m/s)

Map Scale: 1:20,000

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