DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

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NEW YORK STATE DEPARTMENT OF HEALTH

OPEN-FILE REPORT 82-85
(SHEET 4 OF 6)

POTENTIOMETRIC SURFACE

By
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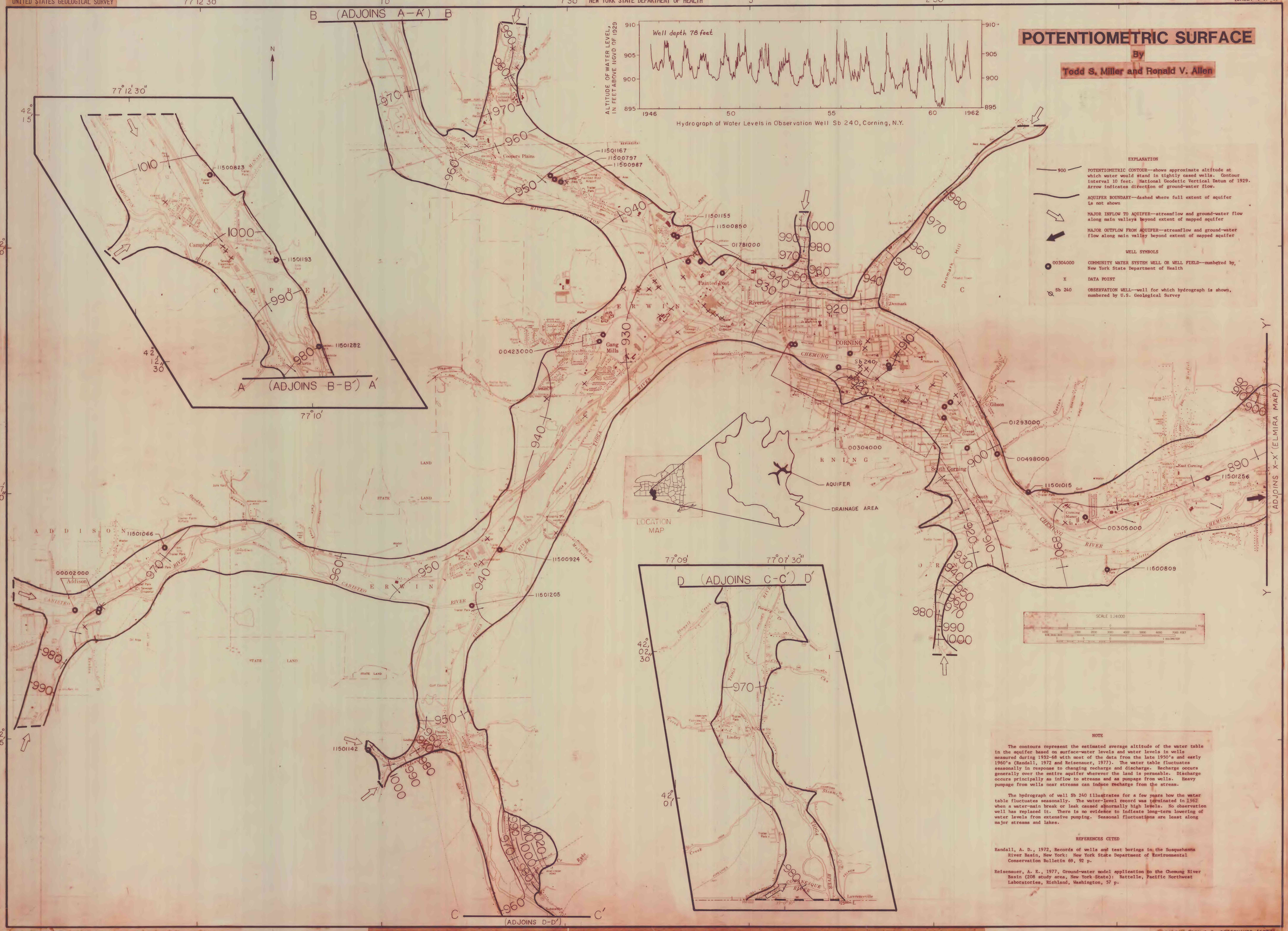

NOTE

The contours represent the estimated average altitude of the water table in the aquifer based on surface-water levels and water levels in wells measured during 1932-68 with most of the data from the late 1950's and early 1960's (Randall, 1972 and Reisenauer, 1977). The water table fluctuates seasonally in response to changing recharge and discharge. Recharge occurs generally over the entire aquifer wherever the land is permeable. Discharge occurs principally as inflow to streams and as pumpage from wells. Heavy pumpage from wells near streams can induce recharge from the stream.

The hydrograph of well Sb 240 illustrates for a few years how the water table fluctuates seasonally. The water-level record was terminated in 1962 when a water-main break or leak caused abnormally high levels. No observation well has replaced it. There is no evidence to indicate long-term lowering of water levels from extensive pumping. Seasonal fluctuations are least along major streams and lakes.

REFERENCES CITED

Randall, A. D., 1972, Records of wells and test borings in the Susquehanna River Basin, New York: New York State Department of Environmental Conservation Bulletin 69, 92 p.

Reisenauer, A. E., 1977, Ground-water model application to the Chemung River Basin (208 study area, New York State): Battelle, Pacific Northwest Laboratories, Richland, Washington, 57 p.

BASE FROM NEW YORK STATE DEPARTMENT OF TRANSPORTATION ADDISON, N.Y., 1977; BIG FLATS, N.Y., 1978; CAMPBELL, N.Y., 1977; CATON, N.Y., 1977; CORNING, N.Y., 1977; SEELEY CREEK, N.Y., 1978. 1:24,000

GEOHYDROLOGY OF THE VALLEY-FILL AQUIFER IN THE CORNING AREA, STEUBEN COUNTY, NEW YORK

1982

HYDROLOGY FROM A.E. REISENAUER (1977) MODIFIED BY T.S. MILLER, 1981