

BEDROCK TOPOGRAPHY

The bedrock topography in the Clifton Park area is part of a regional preglacial drainage system that was glacially scoured to form U-shaped valleys. The most prominent of these is a buried tributary known locally as the Colonie channel (Simpson, 1949, p. 717), which traverses the Clifton Park area in a north-south direction. Within this U-shaped channel is a narrow, V-shaped inner gorge that is cut to sea level in places. The channel has significant ground-water potential because it contains discontinuous deposits of ice-contact sand and gravel that form a confined aquifer capable of producing well yields in excess of 500 gallons per minute in some areas. Much of the information upon which this map is based was collected as part of previous U.S. Geological Survey studies (Dineen and Hanson, 1983; Waller, 1983) to define the location and extent of the Colonie channel.

EXPLANATION

● 103 WELL OR TEST HOLE--location of well, test hole, or test boring that yielded depth-to-bedrock information. Number is altitude of bedrock surface above sea level. A "K" preceding the number indicates that the well did not penetrate bedrock; the number, therefore, indicates the altitude of the bottom of the hole.

○ BEDROCK OUTCROP--indicates area where the underlying shale bedrock (undifferentiated) is at or near land surface. Shading denotes outcrop side of contact.

— 200' BEDROCK CONTOUR--Number indicates bedrock surface altitude. Dashed where approximately located. Hashures indicate depression. Contour interval is 50 feet. Datum is sea level.

A—A' LINE OF SECTION--Geologic sections shown on plate 3.

SELECTED REFERENCES

Dineen, R. J., and Hanson, E. L., 1983, Bedrock topography and glacial deposits of the Colonie Channel between Saratoga Lake and Coeymans, New York: New York State Museum Map and Chart Series, no. 37, 55 p.

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Waller, R. M., 1983, Ground-water potential of the Capital District buried-valley deposits, in Dineen, R. J., and Hanson, E. L., Bedrock topography and glacial deposits of the Colonie channel between Saratoga Lake and Coeymans, New York: New York State Museum Map and Chart Series, no. 37, 55 p.



Base from New York State Department of Transportation 1:24,000 series: Niskayuna (1974), Round Lake (1974).

Geology from R.J. Dineen (1982); modified by R.J. Reynolds, 1983

HYDROGEOLOGY OF THE CLIFTON PARK AREA, SARATOGA COUNTY, NEW YORK

By
Richard J. Reynolds
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