

BEDROCK TOPOGRAPHY

Bedrock in the Rome area consists primarily of Upper Ordovician shale beds that dip gently south-southwestward. The overlying Pulaski and Whestone Gulf formations of the Cincinnati Series overlie the Utica shale (Fisher and others, 1970). North of the Mohawk River, the upper Ordovician Frankfort shale crops out as the caprock on South Hill and Quaker Hill. These hills are all part of a discontinuous north-facing cuesta called the Deerfield Hills (Kay, 1953). The uplands are covered by glacial sediments that thicken within the Mohawk River valley. South of the Mohawk River, these Ordovician rock units are overlain by the Clinton Group of Middle Silurian age. This escarpment of sandstones and shales forms the northern margin of the Allegheny Plateau (Kay, 1953).

The area was uplifted and tilted before the onset of glaciation and was glacially carved to produce the present relief features of the region—the principal ranges of hills and the Mohawk valley (Kay, 1953).

Data from well logs suggest a buried drainage channel within the broader Mohawk Valley that was eroded deeply by the preglacial Mohawk River into the soft underlying Ordovician shales.

SELECTED REFERENCES

Dale, M. C., Geology and mineral resources of the Oriskany Quadrangle, New York: New York State Museum and Science Service Bulletin 345, 197 p.

Halberg, H. N., Hunt, O. P., and Pauszek, P. H., 1962, Water resources of the Utica-Rome area, New York: U.S. Geological Survey Water-Supply Paper 1499-C, 46 p.

Kay, Marshall, 1953, Geology of the Utica Quadrangle, New York: New York State Museum and Science Service, Bulletin 347, 126 p.

Richard, L. V., Fisher, D. W., and Isachsen, Y. W., 1970, Geologic map of New York, Hudson-Mohawk sheet: New York State Museum and Science Service, Map and Chart Series no. 15, scale 1:250,000.

EXPLANATION

- WELL OR TEST HOLE**—Shows location of well or test hole with depth-to-bedrock data. Number is bedrock-surface altitude, in feet above sea level. *Symbol: (greater than)* preceding the number indicates that the well did not penetrate bedrock; thus, the number indicates the altitude of the bottom of the well or test hole in unconsolidated deposits.
- BEDROCK-SURFACE CONTOUR**—Shows altitude of bedrock surface, approximately located. Contour interval 50 feet. Datum is sea level.
- AQUIFER BOUNDARY**—Contact between unconsolidated aquifer and bedrock/till uplands.

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