?Cmb - Manhattan Schist, Member B - A discontinuous unit of amphibolite with some interbedded schist. It occurs within Member C of the Manhattan Schist and locally at the base of Member C.

Allochthonous Rocks East of Cameron's Line

OChr - Harrison Gneiss - Dark-gray biotite and/or hornblende-quartz-feldspar gneiss with subordinate quartz. Megacrysts of feldspar are abundant locally.

OChts - Hartland Formation, Schist and Granulite Member - Brown to brownish-tan-weathering, garnet-muscovite-biotite-quartz-feldspar schist and muscovite-biotite-quartz-feldspar gneiss and granulite. The schist commonly contains sillimanite and/or kyanite.

Ou - Green serpentinite bodies that are within the Schist and Granulite Member.

OChtw - Hartland Formation, White Gneiss Member - Light-gray or white biotite-muscovite quartz-feldspar gneiss with local garnet. Probably a granitic intrusive sheet.

OChtcp - Hartland Formation, Carrington's Pond Member - Brown- or rusty-weathering, garnet-muscovite-biotite schist with local sillimanite and or kyanite. Amphibolite beds are fairly common.

OChta - A mappable amphibolite horizon (or horizons?) within the Carrington's Pond.

Glenville Quadrangle Bedrock Geology Map 9 w/Explanation

Leo M. Hall

Explanation

Map

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE OF CONNECTICUT
HIGHWAY DEPARTMENT

GLENVILLE QUADRANGLE
CONNECTICUT—NEW YORK
7.5 MINUTE SERIES (TOPOGRAPHIC)

6266 III NE (OSSINING)

6266 II NE (POUND RIDGE)

73°45' 41°07'30"

TACONIC STATE PKWY 7.2 MI. CHAPPAQUA 2.9 MI.

MT. KISCO 5.9 MI.

BEDFORD, N.Y. 6.1 MI.

BANKSVILLE I.I MI.

73°37'30" 41°07'30"

607000m.E. 670 000 FEET (N. Y.) 608 42'30" 609 610 611 40' 612 350 000 FEET (CONN.) 614

4553000m.N.

400 000 FEET (N. Y.)

100 000 FEET (CONN.)

4540000m.N.

MOUNT VERNON 1.3 MI. WHITE PLAINS 4.3 MI.

3.1 MI. TO INTERCHANGE 34 BRIDGEPORT 27 MI.

3.2 MI. TO U.S. I

6266 III SE (WHITE PLAINS)

6266 II SE (STAMFORD)

1.6 MI. TO INTERCHANGE 8

0.3 MI. TO N.Y. 119

1.6 MI. TO INTERCHANGE 4 STAMFORD 4.8 MI.

70 000 FEET (CONN.)

370 000 FEET (N. Y.)

WHITE PLAINS (CITY HALL) 2.5 MI.

41°00' 73°45' MAMARONECK 3.9 MI. 606 330 000 FEET (CONN.) 3.8 MI. TO U.S. I 608 42'30" 609 1.5 MI. TO U.S. I 610 (MAMARONECK) 6265 I NW 1.2 MI. TO INTERSTATE 95 612 40' RYE 1.9 MI. NEW ROCHELLE 9.1 MI. 95 690 000 FEET (N. Y.) NEW ENGLAND THRUWAY (INTERCHANGE 13) 2 MI. NEW ROCHELLE, N.Y. (JUNC. U.S. 1) 11 MI. 615000m.E. 73°37'30" 41°00'

(MOUNT VERNON) 6265 IV NE

(BAYVILLE) 6265 I NE

GEOLOGY BY LEO M. HALL (1981)

Mapped, edited, and published by the Geological Survey

Control by USGS, USC&GS, USCE, and Connecticut Geodetic Survey

Topography by photogrammetric methods from aerial photographs taken 1949. Field checked 1950–1951. Revised 1960

Selected hydrographic data compiled from USC&GS Chart 222 (1959) This information is not intended for navigational purposes

Polyconic projection. 1927 North American datum
10,000-foot grids based on Connecticut coordinate system, and New York coordinate system, east zone
1000-meter Universal Transverse Mercator grid ticks, zone 18, shown in blue

Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked

Red tint indicates areas in which only landmark buildings are shown

SCALE 1:24 000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN LOW WATER
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 7.3 FEET

MN GN
12° 213 MILS
0°52' 15 MILS

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Heavy-duty — Light-duty
Medium-duty — Unimproved dirt
Interstate Route — U. S. Route — State Route

CONNECTICUT
QUADRANGLE LOCATION

Revisions shown in purple compiled in cooperation with Connecticut Highway Department from aerial photographs taken 1971. This information not field checked

Purple tint indicates extension of urban areas

GLENVILLE, CONN.—N. Y.

N4100—W7337.5/7.5

1960
PHOTOREVISED 1971
AMS 6266 II SW—SERIES V816

BRIEF DESCRIPTIONS OF ROCK UNITS IN THE GLENVILLE QUADRANGLE, CONNECTICUT

Autochthonous Rocks

Oma - Manhattan Schist, Member A - Dark-gray or gray, fissile, sillimanite-garnet-muscovite-biotite schist that is rusty-weathering in places. Contains dark-bluish-gray quartzite beds; calcareous schists and phlogopitic marble beds are locally present at the base.

Omam - Manhattan Schist, Marble Member - Tan-weathering phlogopitic calcite marble and some white calcite marble beds.

UNCONFORMITY

O€i - Inwood Marble - Various clean dolomitic marbles.

€l - Lowerre Quartzite - Tan or buff-weathering feldspathic quartzite and granulite, micaceous quartzite and glassy quartzite. Dark-gray, brownish-weathering granulite and schists that commonly contain sillimanite are locally present at the base and resemble rocks in Member C of the Manhattan Schist.

UNCONFORMITY

p€y - Yonkers Gneiss - Pink biotite quartz microcline gneiss that is locally hornblendic. Amphibolite layers are locally present. Possibly intrusive granite or metamorphosed felsic volcanics.

p€fg - Fordham Gneiss, Garnet-Biotite Gneiss Member - Interbedded gray, garnet-biotite gneiss, biotite-hornblende gneiss and amphibolite.

p€famp - Fordham Gneiss, Amphibolite-Gneiss Member - Predominantly amphibolite with some gray biotite-quartz-feldspar gneiss beds.

p€fcs - Fordham Gneiss, Calc-silicate Member - Light-gray, brown, or white calc-silicate rocks which contain abundant green diopside and varied amounts of calcite, marble beds are present locally.

p€fam - Fordham Gneiss, Amphibolite Member - Black amphibolite.

p€fhg - Fordham Gneiss, Hornblende Gneiss Member - Gray to dark-gray biotite-hornblende-gneiss with amphibolite beds commonly present. Pink granitic gneisses are present and are extensive enough to be mapped separately in some places.

p€f - Fordham Gneiss - Undivided gneisses.

Allochthonous Rocks West of Caeron's Line

?€mc - Manhattan Schist, Member C - Predominantly brown-weathering, feldspathic, sillimanite-garnet-muscovite-biotite schist or schistose gneiss, sillimanite nodules are common. Although siliceous beds are present in places bedding is typically difficult to identify.

EXPLANATION

ROCK UNITS

AUTOCHTHONOUS ROCKS

ALLOCHTHONOUS ROCKS

WEST OF CAMERON'S LINE

EAST OF CAMERON'S LINE

PALEOZOIC

Oma
Omam
AUTOCHTHONOUS MANHATTAN SCHIST

UNCONFORMITY

O€i
INWOOD MARBLE

€l
LOWERRE QUARTZITE

UNCONFORMITY

p€y
YONKERS GNEISS

LATE PRECAMBRIAN

PRECAMBRIAN

p€f
p€fg
p€famp
p€fcs
p€fam
p€fhg

CORRELATION UNCERTAIN

? €mc
? €mb
ALLOCHTHONOUS MANHATTAN SCHIST

O€hr
HARRISON GNEISS

Ou — SERPENTINITE
O€hts — SCHISTOSE GRANULITE
O€htw — WHITE GRANITIC GNEISS
O€htep — CARRINGTON'S POND
O€hta — AMPHIBOLITE
O€htep — CARRINGTON'S POND
HARTLAND FORMATION

SYMBOLS

40
STRIKE AND DIP OF BEDDING

28
STRIKE AND DIP OF FOLIATION