Long Hill Rodgers Bedrock Compilation Sheet 2 (paper)

Map

NOTICE !

Bedrock quadrangle 1:24,000 scale compilation sheets for the Bedrock Geological Map of Connecticut, John Rodgers, 1985, Connecticut Geological and Natural History Survey, Department of Environmental Protection, Hartford, Connecticut, in Cooperation with the U.S. Geological Survey, 1:125,000 scale, 2 sheets. [minimum 116 paper quad compilations with mylar overlays constituting the master file set for geologic lines and units compiled to the State map, some quads have multiple sheets depicting iterations of mapping]. Compilations drafted by Nancy Davis, Craig Dietsch, and Nat Gibbons under the direction of John Rodgers.

Geologic unit designation table translates earlier map unit nomenclature to the units ultimately used in the State publication.

This map set contains unpublished maps, cross- sections, and related information archived by the State Geological and Natural History Survey of Connecticut as part of the Survey Library Collection.

These materials have not been reviewed for accuracy, consistency, or completeness. For many geographic areas, more current information exists, either in published or unpublished form.

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J M Stratton 15 July 1977

STATE OF CONNECTICUT
GEOLOGICAL AND NATURAL HISTORY SURVEY
JOE WEBB PEOPLES, DIRECTOR

QUADRANGLE REPORT NO. 24
Plate 1

BEDROCK GEOLOGIC MAP OF THE LONG HILL QUADRANGLE, CONNECTICUT

By William P. Crowley, 1963-1965

Base map by U.S. Geological Survey
Control by USGS, USC&GS, and Connecticut Geodetic Survey

Topography by photogrammetric methods from aerial photographs taken 1949. Field checked 1953. Revised from aerial photographs taken 1963. Field checked 1964

Polyconic projection. 1927 North American datum
10,000-foot grid based on Connecticut coordinate system

UTM GRID AND 1964 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

CONNECTICUT
QUADRANGLE LOCATION

Williams & Heintz Map Corporation, Washington, D.C. 20027

EXPLANATION

In the rock descriptions below, primary minerals are listed in approximate order of increasing abundance. Grain-size definitions are: fine = less than 1 mm; medium = 1-5 mm; coarse = more than 5 mm.

JURASSIC (?)

BD — Buttress Diabase
Brownish-orange-weathering, fine- to medium-grained, dark-gray diabase

PERMIAN (?)

DP — Dacite porphyry
Very fine-grained muscovite dacite with phenocrysts of quartz and plagioclase

PA — Pinewood adamellite
Very light-gray-weathering, medium-grained muscovite adamellite
outcrops of Pinewood Adamellite

MIDDLE AND UPPER ORDOVICIAN (?) — Hartland group

Ppg — Prospect Formation
Most typically moderately well foliated, medium-grained, biotite-quartz-microcline- plagioclase gneiss bearing numerous, large, euhedral megacrysts of Carlsbad-twinned microcline, with minor interlayered muscovitic and biotitic schist, feldspathic and quartzose biotite gneiss, garnet-muscovite-quartz-feldspar gneiss and micaceous quartzite

SMbg / SMbs — Southington Mountain Formation
SMbg—*biotite-gneiss member. Medium- to coarse-grained feldspathic biotite gneiss typically containing a small amount of garnet and hornblende and characterized by plagioclase augen. The content of mafic minerals is variable and defines a layering in which mafic-poor and mafic-rich layers alternate*
SMbs—*banded-schist member. Thinly interlayered, medium- to coarse-grained garnet-plagioclase-biotite-muscovite-quartz schist and finer grained quartzose and feldspathic biotite gneiss*

TFs / TFn — Trap Falls Formation
TFn—*northwestern facies. Largely medium- to coarse-grained garnet-biotite-muscovite-quartz schist and finely laminated, fine-grained biotite-muscovite-quartz schist weathering deep rusty red. Includes interlayered feldspathic gneiss, some of which resembles the chief rock type of the Shelton facies*
TFs—*Shelton facies. Largely medium-grained, generally poorly foliated garnet-muscovite-microcline-quartz-plagioclase gneiss weathering very light tan and bearing tiny spheroidal garnets less than 1 mm in diameter. Interlayered metasediments include medium- to coarse-grained biotitic and muscovitic schist, fine- to medium-grained biotite-plagioclase-quartz gneiss, and tough, fine-grained calc-silicate rock*

TSu / TSl (F) — The Straits Schist
TSu—*upper member. Coarse-grained, locally kyanite-bearing garnet-biotite-plagioclase-muscovite-quartz schist with abundant interlayered biotitic schist and feldspathic schist and gneiss. Amphibolite and/or quartzite common at the base*
TSl—*lower member. Uniform, medium- to coarse-grained, rusty-weathering garnet-plagioclase-biotite-muscovite-quartz schist, normally graphitic and ordinarily bearing kyanite or sillimanite or both*
F—*Large lens of feldspathic gneiss*

basal group

C — Collinsville Formation
Crudely laminated, medium- to coarse-grained feldspathic biotite gneiss locally bearing microcline augen. Finer grained garnet-mica schist and calc-silicate gneiss are locally important. Toward the top includes interlayered amphibolite, quartzite, calcite marble, schist, massive pegmatite and, locally, sulfide deposits

N — Newtown Gneiss
Chiefly medium-grained, poorly foliated to massive biotite-quartz-feldspar gneiss with a variable content of euhedral, large, Carlsbad-twinned microcline megacrysts. Associated minor metasediments include fine-grained, generally finely laminated garnet-biotite- plagioclase-quartz gneiss and fine- and medium-grained mica schist and gneiss locally bearing kyanite and/or sillimanite

P — Pegmatite
M — Marble
Am — Amphibolite

Type or reference locality

Abandoned mine or quarry

Zone of hydrothermal alteration, silicification, and possible faulting

Contact, generally approximate or inferred. Distribution and density of bedding and foliation symbols is a measure of the reliability of any contact

SILLIMANITE ZONE / KYANITE ZONE — Isograd

Upright anticline

Upright syncline

Overturned anticline

Overturned syncline

Inverted anticline

Inverted syncline

FOLIATION OR SCHISTOSITY
vertical · inclined 40 · horizontal

BEDDING
vertical · inclined 30 · horizontal

AXIAL PLANE OF FOLD
vertical · inclined 25

AXIS AND SYMMETRY OF FOLD
inclined: symmetric 30; dextrally asymmetric 20; sinistrally asymmetric 55
horizontal: symmetric

AXIS AND SYMMETRY OF CRINKLING
inclined: symmetric 40; dextrally asymmetric 35; sinistrally asymmetric 30
horizontal: symmetric

MINERAL LINEATION
inclined 14 · horizontal

35 Range in strike of foliation
Vertical foliation
93
Plunge direction
Plunge direction