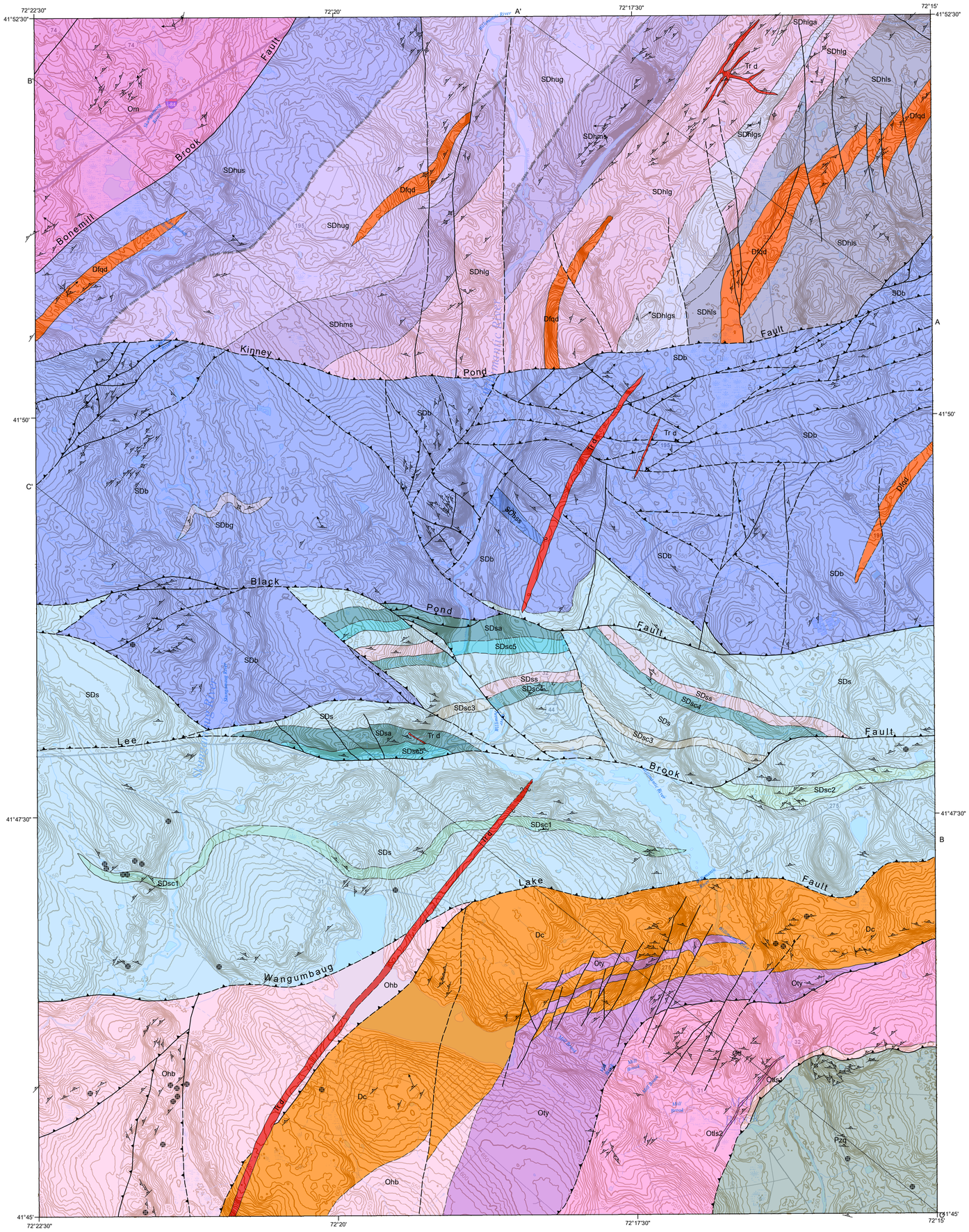


Preliminary Bedrock Geologic Map of the South Coventry Quadrangle, Tolland County, Connecticut

Richard J. Fahey and Maurice H. Pease, 1977

Plate 1

Base map compiled from DEEP data, accessed through www.cteco.uconn.edu.
North American Datum of 1983 (NAD83)
Connecticut State Plane FIPS 0600 (U.S. Feet)
Lambert Conformal Conic Projection

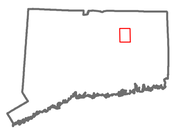
MN
13° 42' W
2021 MAGNETIC NORTH DECLINATION AT MAP CENTER

1:24,000

1 0.5 0 1 2 Kilometers

1 0.5 0 1 2 Miles

CONTOUR INTERVAL 10 FEET



1	2	3
4		5
6	7	8

1 Ellington
2 Stafford Springs
3 Westford
4 Rockville
5 Spring Hill
6 Marlborough
7 Columbia
8 Willimantic

QUADRANGLE LOCATION AND ADJOINING QUADRANGLES

Fahey, Richard J., and Pease, Maurice H. 1977, Preliminary Bedrock Geologic Map of the South Coventry Quadrangle, Tolland County, Connecticut. Open File Report #94-584, 1:24,000 scale, PDF; GIS geodatabase [GeMS format] www.ct.gov/deep/geology

Work on the digital compilation of the Coventry and Stafford Springs 7.5 minute bedrock quadrangle maps has been supported by National Cooperative Geologic Mapping Program StateMap FY2020 Award #G20AC00396 and the Connecticut Geological Survey, Department of Energy and Environmental Protection, funds.

Digital cartography and geodatabase by David Vohra, Connecticut Geological Survey, 2021.

INTRUSIVE ROCKS

Devonian Triassic

Tr d — Diabase Dike. Greenish gray to dark-gray, aphanitic labradorite-augite-hypersthene-magnetite diabase.

Dfqd — Diorite. Weakly layered, medium-to-coarse-grained, grayish-brown to dark-gray weathering diorite. Weakly foliated except near contacts where a strong biotite foliation occurs.

Dc — Canterbury Gneiss. Light-gray, medium-to-coarse-grained, quartz-oligoclase-biotite-muscovite-garnet granodiorite gneiss. Thin biotite rich folia common in the upper part of the gneiss gives the weathered surface a ribbed appearance.

STRATIGRAPHIC UNITS

Merrimac Synclinorium Sequence

Silurian - Devonian

Hamilton Reservoir Formation

SDhus — Upper Schist Member (SDhus). Interlayered reddish-to-orangish-gray weathering aluminous gneiss, rusty-brown to yellowish-gray weathering sulfidic aluminous schist and subordinate amounts of light-gray weathering quartzo-feldspathic gneiss.

SDhug — Upper Gneiss Member (SDhug). Chiefly light-gray to dark-gray, medium-grained quartz-feldspar-biotite-garnet-muscovite gneiss.

SDhms — Middle Schist Member (SDhms). Mostly light-gray to rusty-brown and reddish-orange, medium-grained, quartz-feldspar-biotite-sillimanite-garnet-schist.

SDhlg — Lower Gneiss Member (SDhlg). Thin layered, fine-grained, brown biotite schist.

SDhlga — Amphibole Gneiss Submember (SDhlga). Thinly layered, black hornblende schist and gneiss with minor calc-silicate bearing gneiss.

SDhlgs — Sulfidic Schist Submember (SDhlgs). Lens of brown weathering, sulfide schist.

SDhls — Lower Schist Member (SDhls). Upper two thirds of member is chiefly rusty-brown to reddish-orange weathering quartz-oligoclase-garnet-biotite-sillimanite gneiss and schist with thin felsic gneiss interlayers. Sulfidic schist layers are less common than in SDhms.

Fault

SDb

SDbg — Bigelow Brook Formation (SDb). Composed mostly of gray weathering fine-to-medium-grained quartz-feldspar-biotite-garnet-sillimanite gneiss and schist.
Banded Gneiss Submember (SDbg). Light gray, quartz-plagioclase-biotite gneiss alternating with medium-grained plagioclase-hornblende-garnet amphibolite.

SDbss — Sulfidic Schist Submember (SDbss). Red-orange to yellowish-gray weathering sulfide schist.

SDs

SDsa — Southbridge Formation (SDs). Medium-grained, well bedded, quartz-plagioclase-biotite schist.

SDsc5 — Amphibolite. Amphibolite containing interlayers of greenish-gray gneiss and biotite schist.

SDss — Calc-Silicate Gneiss 5. Greenish-gray gneiss interlayered with thin beds of biotite schist.
Aluminous Schist. Quartz-plagioclase-biotite gneiss interlayered with sulfidic graphitic schist.

SDsc4 — Calc-Silicate Gneiss 4. Lens of amphibole gneiss interleaved with thin beds of biotite schist.

SDsc3 — Calc-Silicate Gneiss 3. Fine-grained, greenish gray, conspicuously layered gneiss.

SDsc2 — Calc-Silicate Gneiss 2. Thick lenses of hornblende-calcite gneiss interleaved with biotite schist.

SDsc1 — Calc-Silicate Gneiss 1. Greenish-gray gneiss interlayered with minor amounts of biotite schist.

Fault

Willimantic Dome Sequence

Ordovician

Ohb — Hebron Formation (Ohb). The Hebron Formation is a homogeneous sequence of medium-gray, thinly layered, quartz-feldspar-biotite schist intercalated with quartz feldspar rich layers.

Tatnic Hill Fm

Oty — Tatnic Yantic Member (Oty). The Yantic Member is predominately gneiss interlayered with biotite schist and minor amounts of amphibolite.

Otl — Tatnic Lower Member (Otl). Heterogeneous sequence of gneiss and aluminous rich schist.

Otls2 — Sulfidic Schist Submember (Otls2). Greenish-gray gneiss interlayered with biotite schist.

Otls1 — Sulfidic Schist Submember (Otls1). Very strongly cataclased aluminous sulfide schist.

Fault

Precambrian

Pzq — Quinebaug Formation (Pzq). Mostly light-to-medium-gray quartz-plagioclase gneiss with minor biotite and very little hornblende interlayered with dark-gray to greenish-black hornblende amphibolite.

Bronson Hill Anticlinorium Sequence

Ordovician

Om — Monson Gneiss (Om). Chiefly banded light-to-medium-grained thickly layered granitic quartz feldspar biotite gneiss. Hornblende is present but minor in the granitic gneiss, but dark-gray hornblende-rich gneiss, locally containing garnet is interlayered with the lighter gray gneiss.

EXPLANATION OF MAP SYMBOLS

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Axial trace of anticline; terminal arrow shows plunge. Location accurate.

Strike and dip of inclined disjunctive, symmetric crenulation foliation.

Strike and dip of foliation.

Horizontal foliation.

Bearing and plunge of inclined lineation.

Strike of vertical foliation.

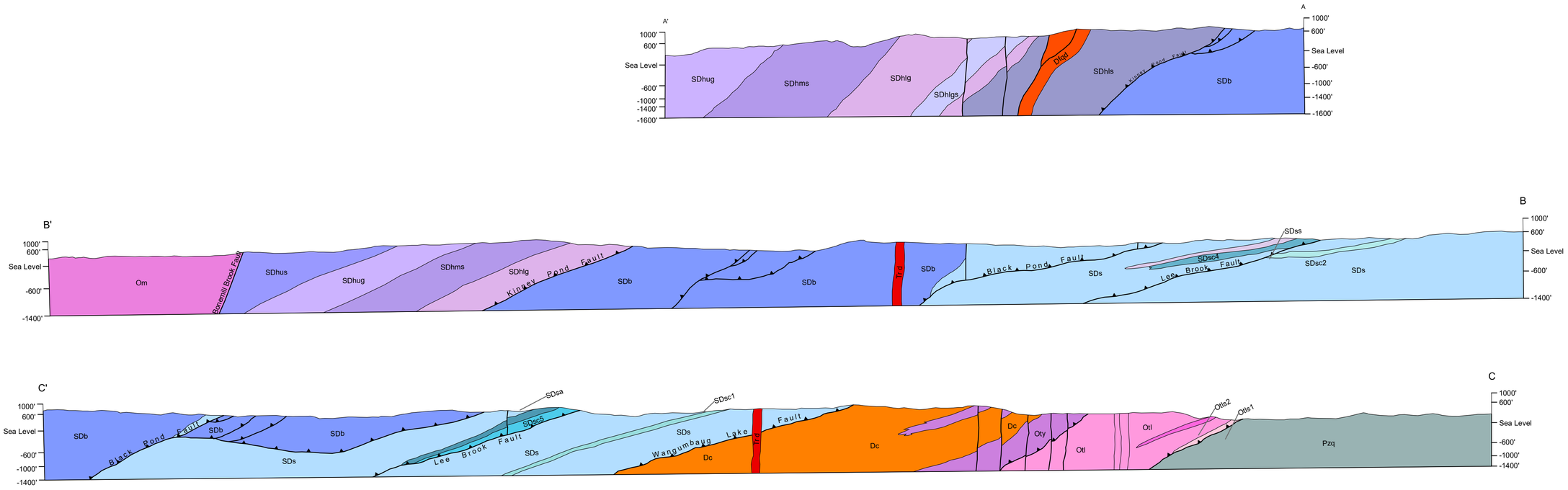

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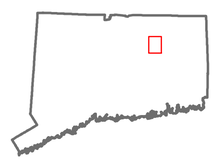
Plate 2



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Fault

STRATIGRAPHIC UNITS (CONT.)

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