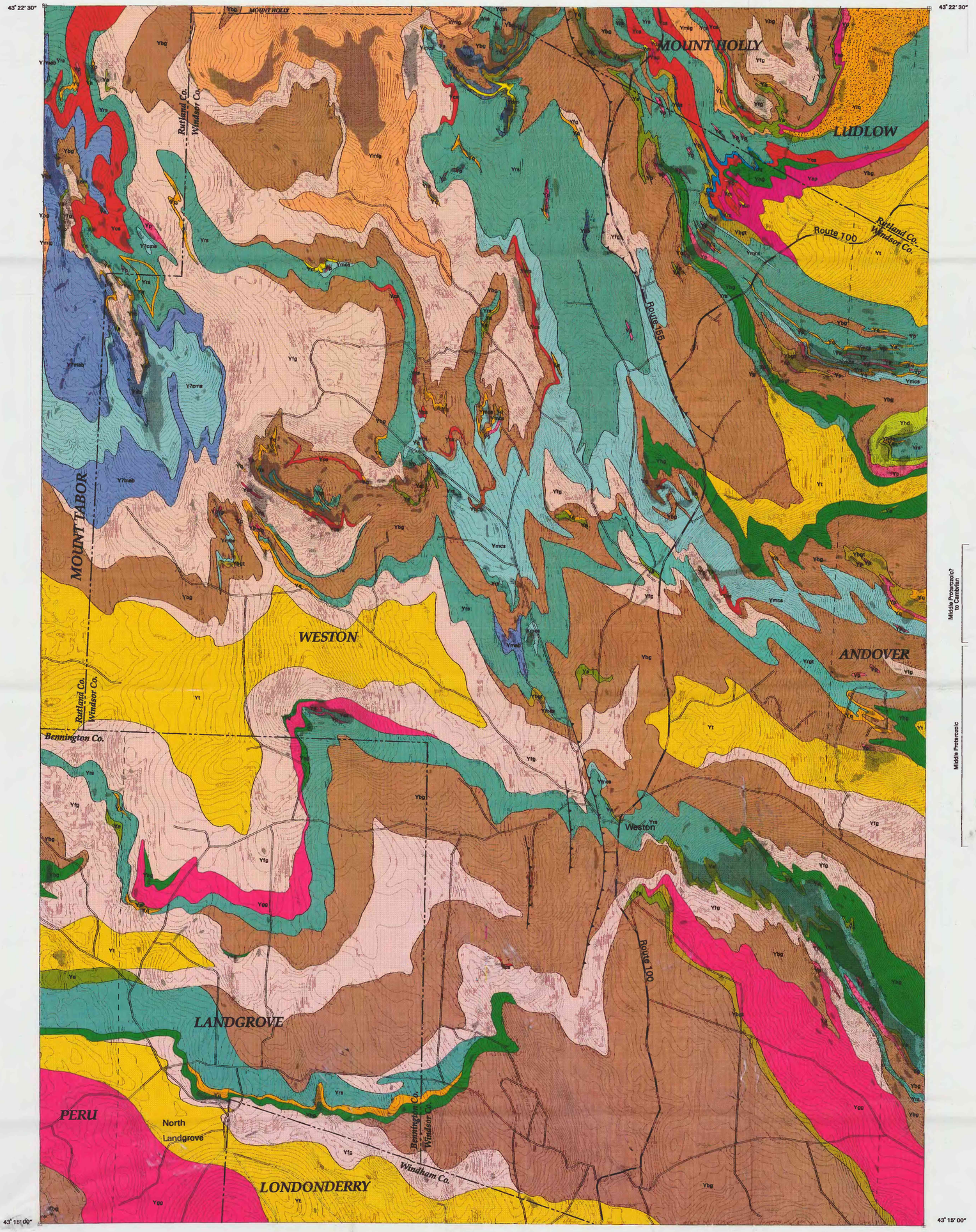
U.S. Department of the Interior
U.S. Geological Survey

Prepared in cooperation with the
STATE OF VERMONT, GEOLOGICAL SURVEY

OPEN-FILE REPORT 96-526A
GEOLOGIC UNITS AND OUTCROP MAP
PLATE 1 of 2



Description of Map Units

(Not necessarily in stratigraphic order; minerals listed in order of increasing abundance)

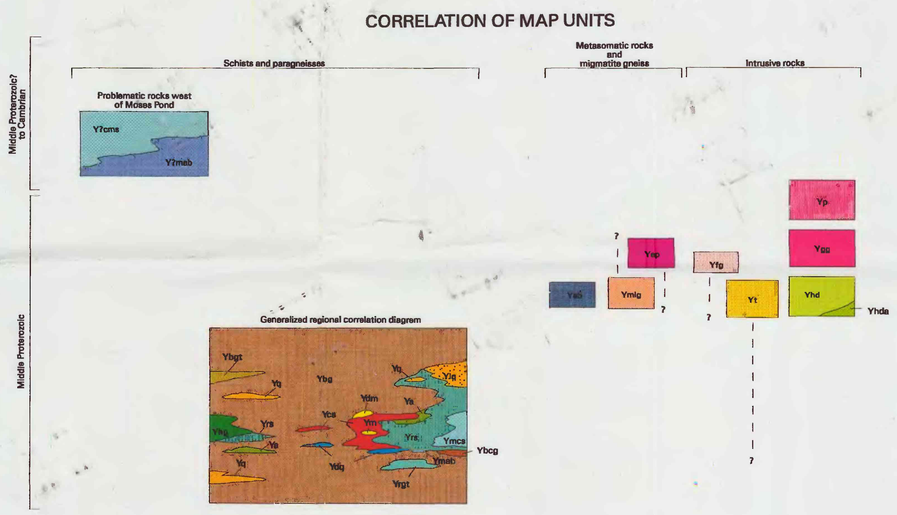
SCHISTS AND GRANOFELS OF POSSIBLE MIDDLE PROTEROZOIC AGE

- Y?cms — Garnet-chlorite-quartz-muscovite +/- chloritoid schist
- Y?mab — Biotite-muscovite-albite-quartz schist

MIDDLE PROTEROZOIC MOUNT HOLLY COMPLEX

- Yp — Granite pegmatite
- Ygg — Biotite granite gneiss
- Yap — White, feldspar-rich aplite gneiss
- Yhd — Hornblende diorite gneiss
- Yhda — Fine-grained hornblende-plagioclase amphibolite
- Yt — Trondhjemite gneiss
- Ymig — Migmatite gneiss
- Yfg — Felsic magnetite-biotite gneiss
- Yab — Albite-muscovite-biotite-quartz schist
- Ya — Amphibolite
- Yhg — Hornblende-plagioclase gneiss
- Ybg — Biotite-quartz-plagioclase gneiss
- Ybgt — Garnet-muscovite-biotite-plagioclase-quartz gneiss
- Yrs — Garnet-chlorite-muscovite-quartz +/- chloritoid schist
- Yrgt — Garnet-muscovite-biotite-plagioclase-quartz schist
- Ymcs — Lustrous, chlorite-muscovite-quartz +/- chloritoid schist
- Ymab — Biotite-muscovite-albite-quartz schist
- Yq — White vitreous quartzite
- Ylq — Massive vitreous quartzite from Ludlow Mountain
- Ycs — Calc-silicate rocks including hornblende-diopside gneiss, calcite marble, calcite-diopside marble, tremolite-calcite or tremolite-dolomite marble, scapolite rock, scapolite-phlogopite dolomite marble, plagioclase-microcline-diopside-quartz-calcite granofels or gneiss
- Ym — Calcite marble
- Ydm — Orange-tan dolomite marble, gray phlogopite-dolomite marble
- Ydq — White, diopside quartzite
- Ybcg — Clinozoisite-biotite-actinolite-plagioclase-quartz gneiss

CORRELATION OF MAP UNITS



Topography from the Weston, VT quadrangle (1986 edition)
Contour Interval 6 meters
Map projection is Universal Transverse Mercator
Digital map units in State Plane Coordinate System
National Geodetic Horizontal Datum of 1927
Roads from the Vermont Center for Geographic Information, Inc.

SCALE 1:24000
1 0 1 MILE
1 0 1 KILOMETER
0 1 2 3 THOUSAND FEET

MN N
Approximate Mean Declination
15°00' West, 1986

Geology mapped by Ratcliffe in 1989-1995 and Burton in 1989.
Digtized by Burton and Thomas Merrifield[2].

LOCATION OF MAP

Digital Bedrock Geologic Map of the Weston Quadrangle, Vermont

by

N.M. Ratcliffe[1] and W.C. Burton[1]

1996

AFFILIATIONS:
[1]U.S. Geological Survey
Reston, Virginia 22092
[2]Vermont Agency of Natural Resources,
Vermont Geological Survey,
Office of Information Management Services,
Waterbury, Vermont 05671

Explanation of Map Symbols

- Contacts
- Outcrops (areas of exposed bedrock examined in this study)
- Thrust fault, teeth on upper plate

Plates 1 and 2 are part A and the database is part B of this Open-File Report. Both parts are available from the Vermont Geological Survey, telephone (802) 241-3468.

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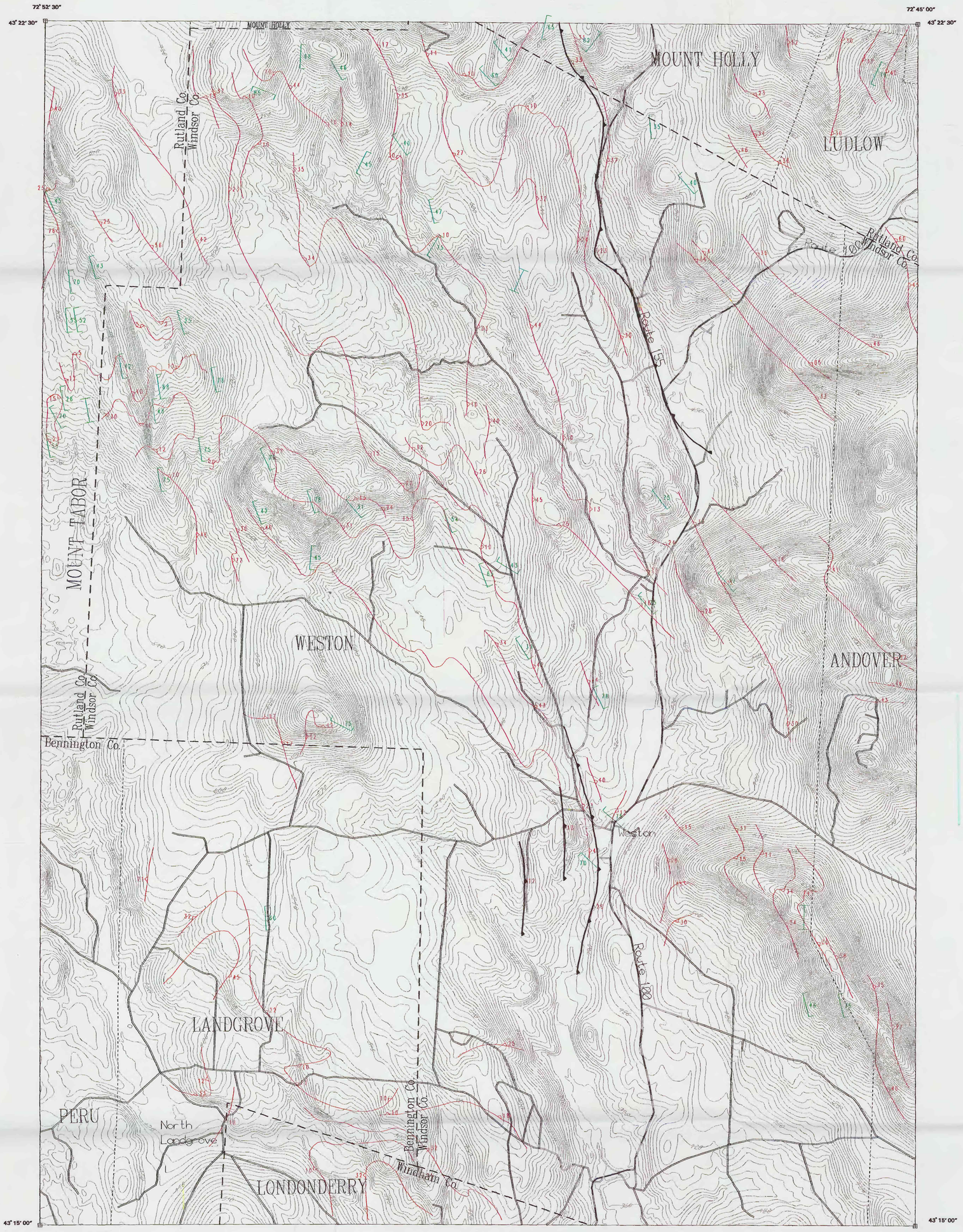
OPEN-FILE REPORT 96-526A
STRUCTURE MAP
PLATE 2 of 2



Explanation of Map Symbols

Foliation
- 70 — Strike and dip of inclined foliation on interpretive form-lines
- Strike and dip of vertical foliation on interpretive form-lines

Cleavage
- 73 — Strike and dip of inclined cleavage
- Strike and dip of vertical cleavage

Thrust Faults
- Thrust fault, teeth on upper plate

Plates 1 and 2 are a paper representation of the digital bedrock geologic information for the Weston Quadrangle located in Rutland, Windsor, Bennington and Windham counties, Vermont. All of the bedrock geology data were obtained from Ratcliffe and Burton (unpublished data), and were digitally compiled on a personal computer system using PC ARC/INFO version 3.4D Plus by Environmental Systems Research Institute, Inc.. The data shown on Plate 1 were exported to ARC/INFO version 7.0 where solid color fill patterns were generated, and faults were drawn using symbols from a lineset (alcnew61.lin) from ALACARTE software (Fitzgibbon and Wentworth, 1991). The compilation procedures discussed in Walsh and others (1994) were used in the preparation of this report, with the exception of the topography. The topography was obtained from a photographic negative separate of contour lines from the Weston, VT (1986 provisional edition) U.S.G.S. 7.5-minute topographic quadrangle. The negative was scanned on an IDEAL FSS 8000 raster-format scanner. The raster image was vectorized using GTX OSR Contour version 2.00 by GTX Corporation, Inc., and converted into an unattributed line coverage in ARC/INFO version 7.0.

1. Fitzgibbon, T.T., and Wentworth, C.M., 1991, ALACARTE user interface: AML code and demonstration maps, Version 1.0: U.S. Geological Survey Open-File Report 91-587.

2. Walsh, G.J., Ratcliffe, N.M., Dudley, J.B., and Merrifield, T., 1994, Digital bedrock geologic map of the Mount Holly and Ludlow quadrangles, Vermont: U.S. Geological Survey Open-File Report 94-228, scale 1:24000.

Topography from the Weston, VT quadrangle (1986 edition)
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