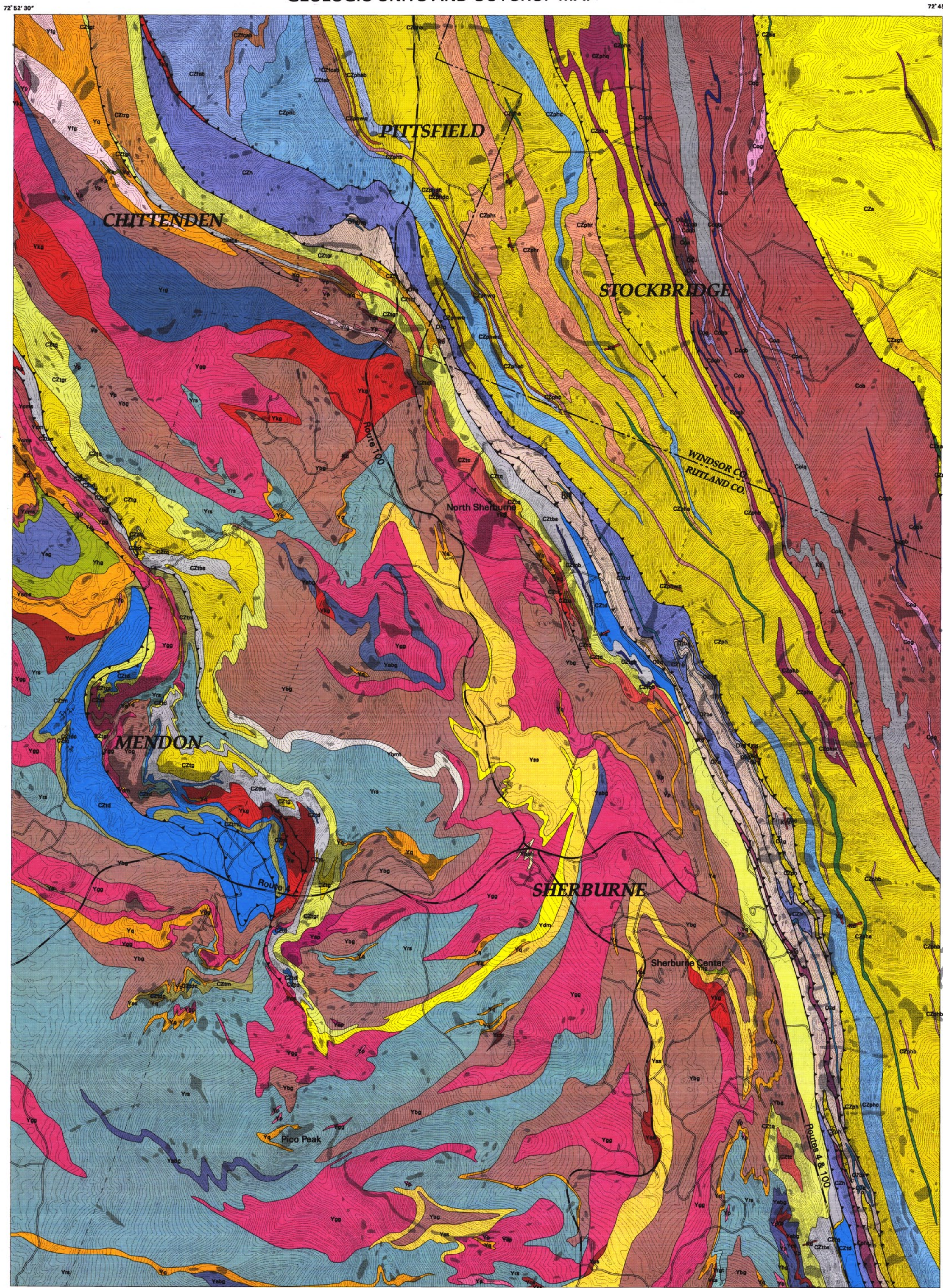
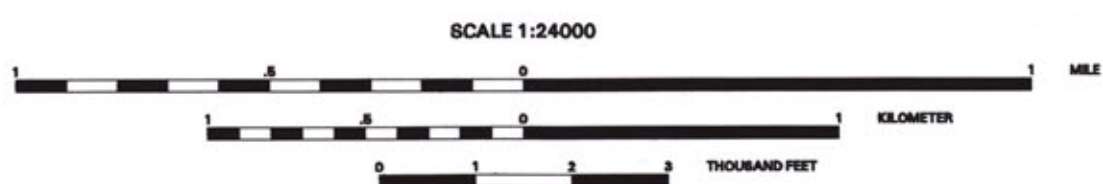


GEOLOGIC UNITS AND OUTCROP MAP



Topography from USGS Pico Peak, VT 7.5' quadrangle (1961 edition)
Contour Interval 20 feet
Digital map units in State Plane Coordinate System
National Geodetic Horizontal Datum of 1983
Roads and town boundaries from the Vermont Center for
Geographic Information, Inc.

Geology mapped by G.J. Walsh and N.M. Ratcliffe 1993-1997.
Digitized by Walsh, Vicki N. Keegan, and Jonathan Kim.



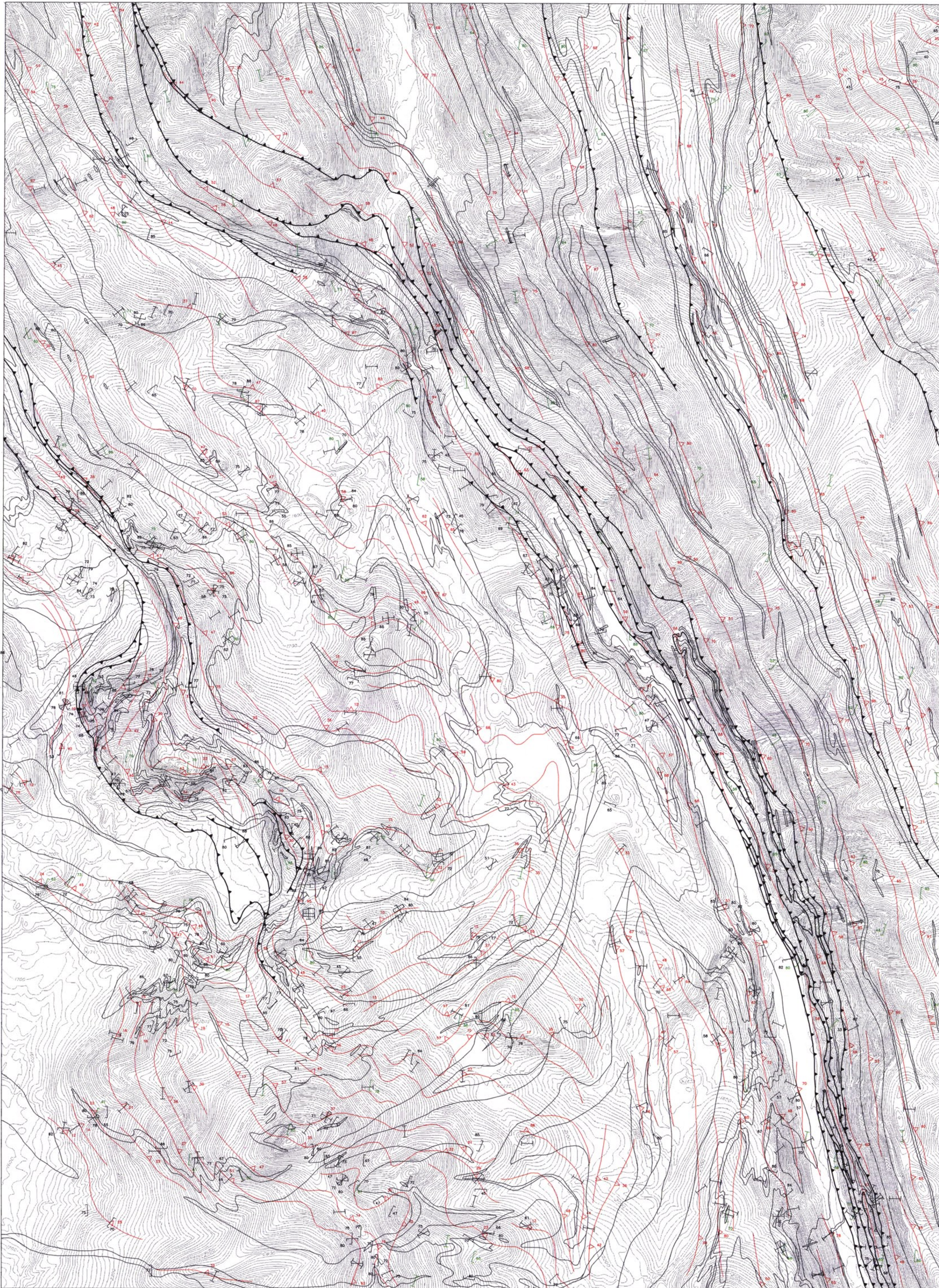
MN N

Approximate Mean Declination
15°00' West, 1980

AFFILIATIONS:
U.S. Geological Survey
Reston, Virginia 20192
Vermont Agency of Natural Resources,
Vermont Geological Survey,
Waterbury, Vermont 05671

Digitized by

STRUCTURE MAP



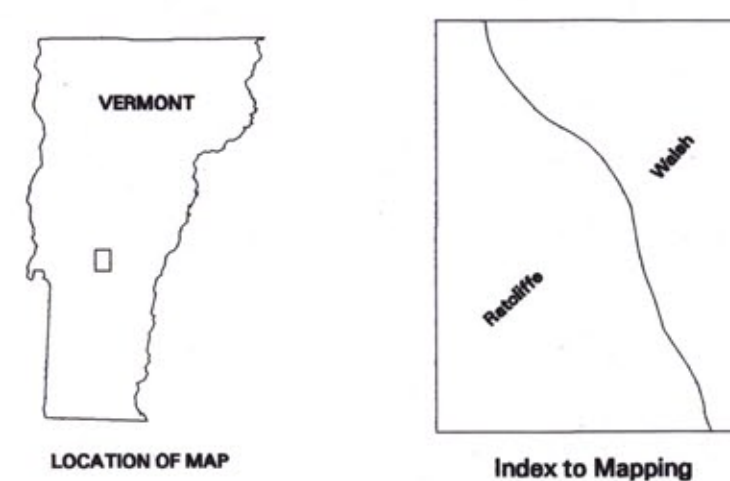
Description of Map Units

- (Not necessarily in stratigraphic order; minerals listed in order of increasing abundance)
- LATE-METAMORPHIC AND POST-METAMORPHIC INTRUSIVE ROCKS**
 - Kd Lamprophyre dikes (Cretaceous?)
 - Kds Syenitic dike (Cretaceous)
 - Dg Granodiorite dike (Devonian?)
 - UNNAMED ROCKS (Ordovician?)**
 - O7ba Gray to dark-gray, carbonaceous biotite-muscovite-quartz phyllite to fine-grained schist that contains thin beds of blue-gray quartzite, dolomitic quartzite, and blue-gray ribbon dolomite, contains Middle Ordovician to Late Ordovician conodonts 100m southeast of quadrangle border
 - O7d Dolomite marble and lesser calcite marble
 - O7q Vitreous and feldspathic quartzite
 - O7g Black, graphitic, locally sulfidic, quartz-muscovite schist and phyllite
 - ROCKS OF THE EASTERN COVER SEQUENCE**
 - Ultramafic Rocks**
 - OZu Talc carbonate rock
 - Ottawaquechee Formation (Cambrian)**
 - Cob Dark-gray to black, rusty weathering, sulfidic, graphitic, chlorite-quartz-muscovite phyllite and fine-grained schist
 - Coqb Black quartzite
 - Coq Tan quartz schist and quartzite
 - Colq Well layered and interbedded quartz schist and quartzite (like Coq), black quartzite (like Cob), and black phyllite and schist (like Cob)
 - Cog Gray to gray-green, locally rusty weathering, medium-grained chlorite-biotite-muscovite-plagioclase-quartz schist
 - Coa Greenstone
 - Plymouth Formation (Cambrian)**
 - Cpfg Pinetriped feldspathic biotite-muscovite-quartz gneiss to schistose quartzite. Unit interpreted as a tectonite
 - Hoosac Formation**
 - CZh Green and gray albite-quartz granofels
 - Tyson Formation (Cambrian and Late Proterozoic?)**
 - CZtr Gray to gray-green, locally rusty weathering biotite-chlorite-muscovite-albite-quartz granofels with pebbles of feldspar and blue quartz, and magnetite octahedra
 - CZtrg Gray to dark-gray, rusty weathering, muscovite-plagioclase-quartz granofels and muscovite quartzite with blue-quartz pebbles, and medium-grained, rusty weathering gray muscovite-quartz schist and chlorite-plagioclase-muscovite-quartz schist
 - CZtg Gray to greenish gray chlorite-muscovite-quartz phyllite and fine-grained schist to gritty greenish gray phyllite and schist
 - CZtm Gray to greenish gray chlorite-muscovite-quartz phyllite and fine-grained schist with abundant magnetite
 - CZtc Pebble to cobble conglomerate, and white-weathering, pebbly feldspathic quartzite or gritty quartz schist
 - CZtq Quartzite
 - CZtfd Feldspathic quartzite
 - CZtd Dolomite marble
 - CZtdc Light-beige-to orangeish-gray-weathering, dolomitic quartzite, conglomerate and feldspathic grit
 - CZtqb Black quartzite
 - CZtbs Rusty weathering, dark-gray, carbonaceous muscovite-quartz phyllite containing abundant pyrite
 - Stowe Formation (Cambrian and Late Proterozoic)**
 - CZs Fine-grained, silvery green plagioclase-chlorite-quartz-muscovite schist with abundant quartz-vein segregations and laminated plagioclase-chlorite-muscovite-quartz schist
 - CZsgt Silvery green to gray-green plagioclase-chlorite-quartz-muscovite schist with large garnet porphyroblasts
 - CZsa Greenstone
 - Fayston formation (Cambrian and Late Proterozoic)**
 - CZfab Gray-green, albitic magnetite-chlorite-albite-quartz-muscovite schist
 - CZfcb Tan to dark-gray or black, carbonaceous to graphitic, albitic chlorite-albite-quartz-muscovite schist
 - Pinney Hollow Formation (Cambrian and Late Proterozoic)**
 - CZph Silvery green magnetite-chlorite-quartz-sericite phyllite to fine-grained schist
 - CZphc Gray to steel-gray, and light-gray to silvery tan, quartz-knotted chloritoid-chlorite-quartz-sericite schist
 - CZpha Greenstone
 - CZphb Dark-gray to black, rusty weathering, carbonaceous to graphitic, locally sulfidic chlorite-quartz-muscovite schist and chlorite-albite-quartz-muscovite schist
 - CZphd Tan to silvery green, rusty to orange weathering, laminated dolomitic quartzite, dolomite-muscovite-biotite-plagioclase-quartz gneiss, and dolomite-chlorite-muscovite-quartz schist
 - CZphr Silvery gray to steel-gray, rusty weathering, sulfidic chlorite-chlorite-sericite phyllite and fine-grained schist
 - CZphq Light-gray to gray-green, laminated, gritty, chlorite-muscovite-plagioclase-quartz schist to poorly laminated granofels
 - CZphw Dark-gray to gray-brown, massive, biotite-chlorite-muscovite-plagioclase-quartz granofels or metawacke with small pebbles of blue-quartz, feldspar, and rock fragments
 - CZphab Gray-green to silvery green, chlorite-albite-quartz-muscovite schist
 - CZphwq White to very light gray, granular to vitreous, quartzite to muscovitic quartzite
 - ROCKS OF THE GREEN MOUNTAIN MASSIF**
 - Mount Holly Complex (Middle Proterozoic)**
 - Intrusive and Migmatitic Rocks**
 - Ygg Biotite granite gneiss
 - Yap White, fine-grained plagioclase- or microcline-rich aplite gneiss
 - Ykg Biotite-microcline granite augen gneiss and megacrystic pegmatite granite gneiss
 - Yhg Massive, biotite-hornblende-quartz-plagioclase gneiss
 - Yp Biotite granite pegmatite with metamorphic muscovite, garnet, epidote, and tourmaline
 - Metasedimentary and Metavolcanic Rocks**
 - Ybg Heterogeneous biotite-chlorite-plagioclase-quartz gneiss with layers of epidote- and quartz-rich gneiss or metaquartzite, amphibolite, and hornblende-biotite-quartz-plagioclase gneiss
 - Yfg Pinkish gray-green to white or layered green and white, fine-grained, finely foliated to well laminated, biotite-chlorite-muscovite-plagioclase-microcline-quartz gneiss
 - Yrg Rusty weathering, chlorite-muscovite-biotite-plagioclase (albite + epidote) gneiss with minor amphibolite
 - Yrgt Rusty to yellowish-gray-weathering, muscovite-biotite-plagioclase-quartz schist, granofels and garnet-studded schistose quartzite, highly retrograded to chloritic schist
 - Yq White to light-blueish-gray, vitreous muscovite quartzite or chlorite-muscovite quartzite
 - Ycs Light-green coarse-grained diopside rock; dark-gray to black, coarse-grained, knotted, hornblende-diopside rock; and white, vitreous diopside quartzite
 - Ydm Dolomite marble
 - Ycm Calcite marble
 - Ycms Magnetite-chlorite-muscovite-quartz schist and granofels
 - Yrs Lustreous to rusty-brown-weathering, steel-gray to light-yellowish-gray schist, or quartz schist; contains chlorite pseudomorphs after garnet
 - Ysa Dark gray, rusty weathering, very sulfidic, muscovite-quartz schist
 - Ya Amphibolite
 - Yabg Gray weathering, albite studded, biotite (chlorite)-quartz granofels and albitic gneiss
 - Ybch Dark-green, chlorite-hornblende-epidote amphibolite; occurs as retrograde screens in Ygg
 - Yeg Epidote-biotite-quartz-plagioclase gneiss
 - Ybmt Gray, magnetite-biotite-quartz-plagioclase gneiss

Explanation of Map Symbols

- Contacts
- Outcrops (areas of exposed bedrock examined in this study)
- Thrust fault, teeth on upper plate
- Pre-metamorphic thrust fault, teeth on upper plate
- Strike and dip of foliation on interpretive formlines
- Strike and dip of inclined cleavage
- Strike and dip of vertical cleavage
- Strike and dip of inclined joint
- Strike and dip of vertical joint
- Abandoned quarry or prospect
- Cretaceous dike (uncolored on structure map)

This plate is a paper representation of the digital bedrock geologic information for the Pico Peak quadrangle located in Windsor and Rutland Counties, Vermont. The database was digitally compiled on a personal computer system using PC ARC/INFO version 3.5 by Environmental Systems Research Institute, Inc. This map was created in ARC/INFO version 7.1. The topography was obtained from a photographic negative separate of contour lines from the Pico Peak (1981 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 ODR Contour version 2.00 by GTX Corporation, Inc., and converted into an unattributed line coverage in ARC/INFO version 7.1.



This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards (or with the North American Stratigraphic Code). Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Government.
This plate is part A and the database is part B of this Open-File Report. Both parts are available from the Vermont Geological Survey, telephone (802) 241-3608.

1997.