

Description of Map Units

Cretaceous Dikes

Kd Diabase Dike: massive, vertically-oriented, black, aphanitic basic dikes ranging from 0.5m to 1.5m in thickness.

Mount Abraham Schist

€Za2 Fine-grained, steel blue-gray to silvery tan muscovite-paragonite-quartz-chlorite-chloritoid-gar... schist ± magnetite. More homogenous than CZa and does not include CZag or CZaw.

€Za3 Silvery white schist similar to CZa1 and CZa2 with large (<2 cm) garnet porphyroblasts and microscopic allanite.

€Za4 Fine-grained, steel blue-gray muscovite-paragonite-quartz-chlorite-chloritoid-kyanite-granet schist ± magnetite with quartz vein segregations and chloritoid porphyroblasts.

€Za Chloritoid-White Mica Schist: silvery-gray, fine to medium grained chlorite-shloritoid-quartz-white mica schist, locally minor garnet and magnetite porphyroblasts. Distinctive chlorite streaks and 1 cm rusty needles of altered kyanite are common.

€Zamg Magnetite-Garnet Schist: shiny, coarse grained muscovite-paragonite schist with distinctive porphyroblasts of magnetite (0.5- 1.5 cm) and chloritized garnet (< 2 cm). Also contains varying amounts of plagioclase, opagues, graphite, kyanite, and pyrite.

Granville Formation/Hazens Notch Formation

€cg Carbonaceous Albitic Schist: black, rusty-weathering, medium-grained quartz-muscovite-albite-chlorite-graphite schist.

€cgl Lincoln Gap Member: black rusty-weathering quartz-muscovite-albite-graphite-pyrite schist with 5 cm, thick black quartzites.

€Zhn White Albitic Schist: white, medium to coarse-grained, massive to foliated, albite-chlorite-quartz-sericite schist with minor biotite and garnet.

€Zhnca Carbonaceous Albitic Schist: black, rusty-weathering, medium to coarse-grained, well foliated quartz-sericite-albite-chlorite-graphite schist. Thin black and white pinstriped quartzites occur locally.

Fayston Formation

€Zf White Albite Schist: silvery-green, medium grained, muscovite-quartz-albite-chlorite-garnet-magnetite schist with thin gray quartzites.

€Zfb Quartz-Biotite Gneiss: medium to coarse-grained, salt and pepper color, quartz-albite-biotite-magnetite-pyrite schist and gneiss.

€Zft Tourmaline Schist: silvery dark gray to rusty, medium-grained, quartz-muscovite-albite-tourmaline-chlorite schist.

€Zfg Greenstone: fine-grained, dark-green, rusty-weathering, chlorite-albite-calcite-epidote-pyrite schist.

Monastery Formation

€Zm Schist: intercalated, tan, sandy, quartz-muscovite-biotite-albite-garnet schist, silvery-tan sericite schist, silvery-green quartz-chlorite-muscovite-albite schist and gray and tan quartzites.

€Zmg Greenstone: fine-grained, dark-green, rusty-weathering, chlorite-albite-calcite-epidote-pyrite schist.

Battell Formation

€bw White River Member: dark-gray, carbonaceous, muscovite-quartz-albite schist with black quartzites, brecciated dolomitic marble, quartz veins, and tan-weathering pods of dolomite.

Underhill Formation

€Zunl Quartz Laminated Schist: light-gray to tan and rusty, fine-grained, well-foliated, quartz-muscovite-chlorite-albite ± dolomite schist.

€Zun Schist and Metawacke: light-gray to silver-green, fine-grained, quartz-albite-biotite-muscovite-chlorite schist; coarse-grained light gray-green, quartz-albite-biotite-chlorite-magnetite-pyrite schist and gneiss.

€Zunb Biotite Metagraywacke and Greenstone: dark-gray, fine to medium-grained, quartz-albite-biotite-chlorite-sericite schist and metagraywacke interlayered with amphibole-chlorite-epidote-quartz-albite-biotite-sphene greenstone.

€Zuna Metagraywacke and Amphibolite: dark-gray, coarse-grained, quartz-albite-biotite-chlorite-sericite metagraywacke interlayered with dark gray, amphibolite-albite-epidote-quartz-chlorite amphibolite.

€Zung Greenstone and Amphibolite: fine to medium-grained, light to dark-green, amphibole-albite-chlorite-epidote schist; coarse-grained, dark-green, weakly-foliated, amphibole-albite-biotite-epidote amphibolite.

Pinnacle Formation

€Zpcm Mottled Muscovite Schist: brown mottled, silver-gray muscovite schist.

€Zpm Muscovite Schist: silver-gray, quartz-albite-muscovite schist.

€Zpbg Biotite Graywacke: coarse-grained, massive, thickly-bedded, biotite graywacke.

€Zpl Metagraywacke and Phyllite: undifferentiated light-gray, massive, medium-grained quartz-sericite-chlorite-albite metagraywacke, fine-grained, gray or green sericite-chlorite-quartz-epidote phyllite and schist.

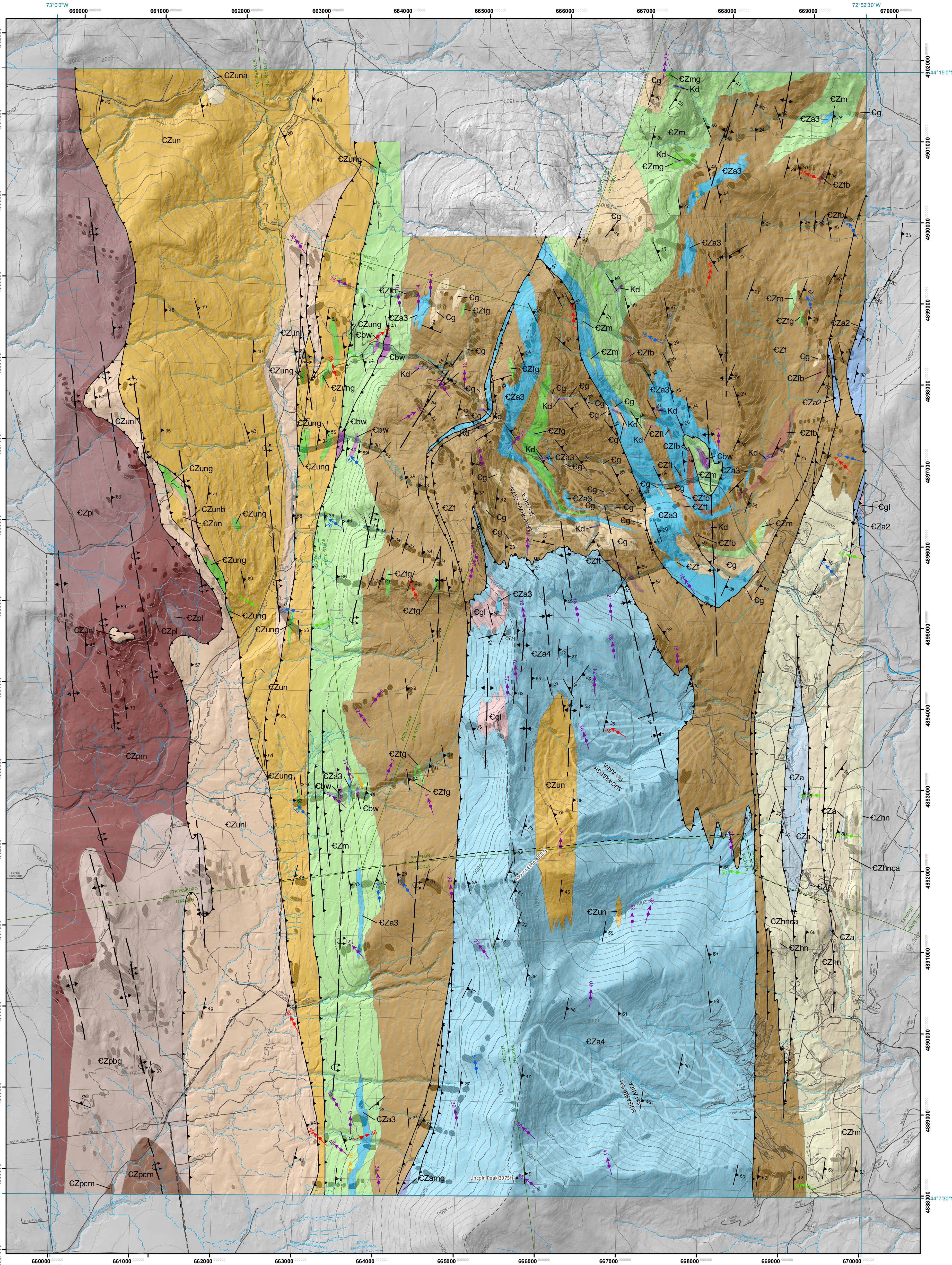
Description of Map Symbols

- ▲ Summits
- Roads
- - - Trails
- USGS 24K Quad Boundaries
- Town Boundary
- - - Green Mountain National Forest Boundary
- Ski Trails
- Rivers/Streams
- Lakes/Ponds
- Thrust Fault
- Bedrock Outcrops
- Planar Features (Relative Age)
 - ↘ Inclined Cleavage, S(n+1)
 - ↘ Inclined Schistosity, S(n)
- Linear Features (Relative Age)
 - ↗ Trend and Plunge of F(n+3), F(n+3)
 - ↗ Trend and Plunge, F(n+2)
 - ↗ Trend and Plunge, F(n)
 - Mineral Lineation
 - Quartz Rods
- Green Mountain Anticlinorium Fold Axes
 - Anticline
 - Syncline
 - Overturned Anticline



Published by:
 Vermont Geological Survey
 Department of Environmental Conservation
 Agency of Natural Resources
 1 National Life Drive, Main 2
 Montpelier, VT 05620-3902
<http://dec.vermont.gov/geological-survey>
 Reformatted 2017

Research supported by the Vermont Geological Survey, Dept. of Environmental Conservation, VT ANR. This geologic map was funded in part by the USGS National Cooperative Mapping Program. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government.



Coordinate System: Vermont State Plane, Meters, NAD 83.
 Grid Overlay: UTM Zone 18N, NAD 83.
 LIDAR basemap from Vermont Center for Geographic Information.

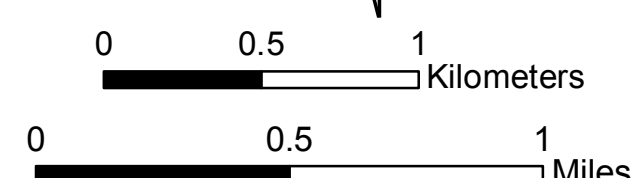
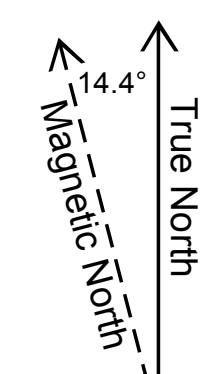
BEDROCK GEOLOGIC MAP OF THE MT. ELLEN 7.5 MINUTE QUADRANGLE, VERMONT

by

R. S. Stanley, G. J. Walsh, P. R. Tauvers, J. A. DiPietro, and V. DelloRusso

Vermont Geological Survey Open File Report VG95-6

Compiled by Rolfe Stanley and Marjorie Gale
 Digital Cartography by Colin Dowey, Tom Merrifield, Dave Dreher



1:24,000 Contour Interval = 100 ft

