












Bedrock Geology of the Morrisville Quadrangle

George Springston, Jonathan Kim, and Scot Applegate

Edited By: Jonathan Kim and Marjorie Gale

Digitized By: Jonathan Kim and Laura Cadmus

Map Published By: Vermont Geological Survey
 Laurence Becker - State Geologist
 Old Laundry Building
 103 South Main Street
 Waterbury, Vermont 05671
 802/241-3608
 Printed: July 27, 2000

| Lithologic Units | |
|---|---|
| Moretown Formation | |
|  | Om Interlayered dark-green and grayish-green quartzose phyllites and quartzo-feldspathic granofels, spaced cleavage in these units gives them a "pinstriped" appearance. Greenstones and metadiabasic intrusives occur locally. |
| Stowe Formation | |
|  | CZSggp Grayish-green quartzose phyllites containing numerous floating hingelines of vein quartz, composed primarily of quartz, sericite, and chlorite; locally contains magnetite |
|  | CZSgr Dark apple green often punky-weathering and weakly calcareous greenstone, composed of chlorite, albite, epidote, and quartz +/- actinolite, magnetite. locally interlayered with grayish-green phyllites. |
|  | CZSes Elmore Schist Member; Silvery muscovite-quartz-chlorite +/- garnet, kyanite, chloritoid schist; garnet and kyanite are retrograded to chlorite and white mica, respectively. Thin greenstones and amphibolites occur throughout. |
|  | CZSea Elmore Amphibolite; dark green to black fine to medium-grained generally massive-weathering, hornblende-plagioclase - epidote - chlorite +/- garnet amphibolite, thin interlayers of schist occur locally. |
| Ottawaquechee Formation | |
|  | Co Undifferentiated, Rusty-weathering, gray to black, carbonaceous to graphitic often pyritiferous phyllites with subordinate grayish-green phyllites; gray, massive granular quartzites; and gray phyllitic granofels. |
|  | Cobp Rusty-weathering, gray to black, carbonaceous to graphitic often pyritiferous phyllites. |
|  | Cobpcg Rusty-weathering, gray to black, carbonaceous to graphitic often pyritiferous phyllites with rusty-weathering calcareous granofels and thin greenstones. |
|  | Comtgpp Silvery grayish-green phyllitic granofels with magnetite and local thin brownish dolomitic layers. |
|  | Thrust Faults |
|  | Outcrop Locations |