Bedrock Geology of the Morrisville Quadrangle, Vermont

Scale = 1:24,000 Contour Interval = 100 feet

George Springston, Jon Kim and Scot Applegate 1998

Edited by Jon Kim and Marjorie Gale Digitized by Jon Kim and Laura Cadmus

Vermont Geological Survey Open File Report VG98-2

Legend

MORETOWN FOMATION (Ordovician)



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 instrusives occur locally.

OTTAUQUECHEE FORMATION (Cambrian)

Со

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.

Comtggp

Silvery grayish-green phyllitic granofels with magnetite and local thin brownish dolomitic layers.

STOWE FORMATION (Cambrian)

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.

CZSea

Elmore Amphibolite; dark green to black fine to mediumgrained generally massive-weathering, hornblendeplagioclase-epidote-chlorite ± garnet amphibolite, thin interlayers of schist occur locally.

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.

Outcrop

Trend and plunge of L2

Trend and plunge of L3

Strike and dip of crenulation cleavage

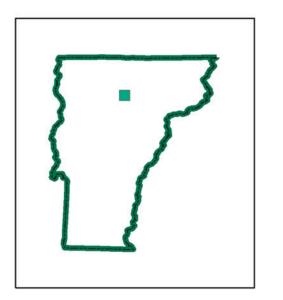
Strike and dip of dominant foliation

Thrust fault - teeth on upper plate

Quadrangle Boundary

Coordinate System: Vermont State Plane Meter, FIPS 4400, NAD83 Grid overlay: UTM Zone 18N, NAD83 Basemap Data from VCGI Elevation data derived from USGS NED 10m DEM.







Published by: Vermont Geological Survey Montpelier, Vermont Laurence Becker, State Geologist Printed July 2000