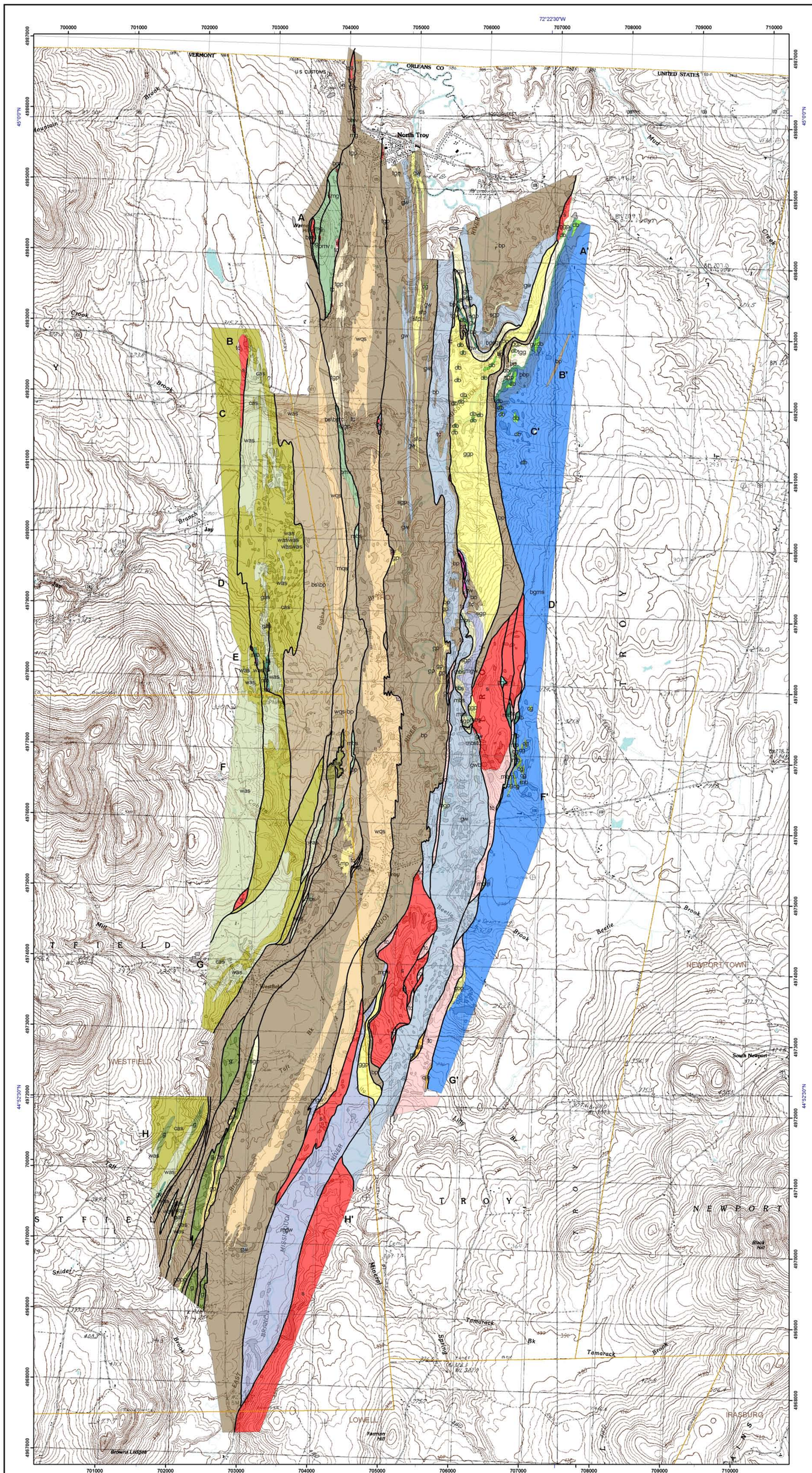
Vermont Geological Survey Open File Report VG97- 04C
Plate 1



Legend

Descriptions of Map Units
The lithologic units include Cambrian and Ordovician metasedimentary and metaigneous rocks of the Hazens Notch, Ottauquechee, Stowe and Moretown Formations.
Units are not listed in stratigraphic order. Please refer to the accompanying interpretive stratigraphy diagram.

- bbp - bluish-black, fine-grained phyllite
- bgms - bluish-green metasiltstone
- tgg - tan, gray granofels and phyllite
- gbp - gray-brown phyllite
- mp - phyllite
- qlp - well foliated, quartz laminated, phyllite
- gp - green phyllite
- ggp - gray-green phyllite
- sgp - medium green phyllite
- tgp - green and tan, chlorite-sericite-quartz phyllites; tan phyllite is more quartzose; light gray, quartz phyllite is commonly associated with the tan phyllite; contact with bp is gradational by complex interlayering (transposed)
- sfp - light green, very dense, fine-graine, quartz-poor phyllite with greasy or satiny foliation surfaces
- bgp - gray-brown and green phyllites
- bp - black, fine-grained, carbonaceous phyllite with pyrite cubes; foliation surfaces have greasy sheen and rust-yellow stains; white to light gray,discontinuous siltstone; includes gray to yellow-brown, finely interlayered phyllite interstratified with black phyllite (bacon rock); thick (0.5 to 2 meters) dark gray to black, glassy quartzites are locally abundant; this unit is characteristic of the Ottaquechee Formation
- bs\bp - black schist and phyllite
- bgw - biotite graywacke
- gw - light colored greywacke and minor green and black phyllites
- gwb - greywacke with black phyllite
- mgw - massive greywacke within layers of grey-green phyllite
- tgw - tan graywacke
- mqs - quartz- magnetite schist
- wqs - white quartz schist with thin interlayers of black and green phyllites
- wqs-bp - interlayered white quartz schist and black phyllite
- cas - carbonaceous albitic schist
- gas - green albitic schist
- was - white to tan albitic schist
- db - metadiabase
- cg - gray, calcareous metadiabase; massive but foliated, calcareous graystones which, in some exposures, grade into metadiabase or metagabbro
- gv - medium to dark green, fine-grained greenstone with bands of magnetite octahedra in some locations; massive foliated fabric within the interior of the unit grades outward into green phyllite; grain size and composition varies from fine-grained greenstone to coarser-grained diabase or diorite in areas west of Big Falls
- g - greenstone
- mbs - green, punky-weathered, calcareous metabasalt
- mbm - metabasalt with magnetite
- mb - metabasalt
- bmv - amphibolite
- mg - dark, mottled green, fine to medium-grained, massive to foliated, ophitic metagabbro composed of hornblende, epidote, albite, quartz,and sphene; assocaited with serpentinite and amphibolite
- s - serpenitnite
- tc - talc-carbonate rich rocks which weather to a distinctive brown with an unsystematic fracture pattern
- ts - cream to light blue talc schist; weathers to a light brown

Thrust fault
Cross-section endpoints
Outcrop
Town Boundary

Fault assemblages were iinterpreted in the Jay area:
Fault Assemblage 1: cas, gas, mb, was
Fault Assemblage 2: bgw, bp, bs-bp, gp, mp, mbs, gw, gwb, mgw, mqs, tgp, wqs, wqs-bp
Fault Assemblage 3: bbp, bgms, cg, db, gbp, tgg
Fault Assemblage 4: bbp, bgms, gbp, gp, mbm, sgp, tgg, tgw
Fault Assemblage 5: s, mg, tc, ts, bmv

Base map from U.S. Geological Survey.
Quadrangle names printed in blue.
Coordinate System: Vermont State Plane, meters, NAD 83.
Geographic coordinates shown at topo corners are in NAD 83.
Grid overlay on map is Universal Transverse Mercator, Zone 18N, NAD 27.
Digital Cartography by Marjorie Gale
Date: May 2010

Magnetic declination 15.5 degrees west, 1998

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BEDROCK GEOLOGIC MAP OF THE JAY AND NORTH TROY AREA, VERMONT

by
Rolfe Stanley and Dana Roy*

1997

Edited by R. Stanley and M. Gale, 1997

*REFERENCES:
Roy, D.L., 1982, The structure and stratigraphy of the Cambrian-Ordovician sequence in the ultramafic belt near Troy, Vermont: Burlington, Vermont, University of Vermont, unpublished M.S. thesis, 123 p.

Stanley, R.S., Roy, D.L., Hatch, N.L., Jr., and Knapp, D.A., 1984, Evidence for the tectonic emplacement of the ultramafic and associated rocks in the pre-Silurian eugeosynclinal belt of western new England-vestiges of an ancient accretionary wedge: American Journal of Science, v.284, p. 559-595.

Stanley, R.S. and Roy, D., 1997, Digital bedrock geologic map of part of the Serpentine Belt, Lowell and North Troy quadrangles, Vermont: Vermont Geological Survey Open-File Report VG97-04A, scale 1:24,000.

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