Vermont Geological Survey Open-File Report VG94-4:
Westerman, David, 1994, Bedrock Geology of the Northfield Quadrangle, Vermont, Scale 1:24,000

Description of Units

gr Northfield and Edgerton granite: Weakly porphyritic, muscovite-bearing white trondhjemite as lensoidal intrusions, also sills or metatuff horizons

Waits River Formation
ODw Waits River Formation: Well-bedded, dark gray, quartz-muscovite phyllite interbedded with brown-weathering calcareous sandstone.

Northfield Formation
ODn Northfield Formation: Dark gray quartz-sericite slate and phyllite with graded bedding and interbeds of metasiltstone and conglomerate.
ODth Turkey Hill Member: Slates and phyllites with consistent presence of brown-weathering thin beds of calcareous metasiltstone and metasandstone.

Shaw Mountain Formation
Ss Shaw Mountain Formation: Yellow-rusty weathering, quartz pebble conglomerate; crinoidal, calcareous white quartz metasandstone with micaceous partings; pinkish-buff to white quartz-muscovite mylonites.

Crosstown Road Formation
OScr Crosstown Road Formation: Green-weathering metavolcanic rocks lacking pyroclastic texture and ankerite; notable absence of interbedded metasediments.

Irish Hill Road Formation
OSih Irish Hill Road Formation: Blue-green schistose volcanoclastics with 1-2mm blue quartz and plagioclase crystals; plagioclase occurs frequently as clusters in a matrix of chlorite +/- biotite, epidote, calcite, muscovite, albite and opaques; ankerite occurs as a post-strain mineral.

West Berlin Formation
Owb West Berlin Formation: Chlorite-rich, biotite-bearing, mafic schists lacking pyroclastic textures; minerals include albite, clinopyroxene, blue-green amphibole, quartz, chlorite, epidote, muscovite, biotite, calcite, sphene, ankerite, pyrite, magnetite, uvarovite garnet, zircon, rutile and tourmaline; associated with red-brown biotite-bearing quartzite and phyllite.
Owbm Mylonitic member

Cram Hill Formation
Odr Cram Hill Formation: Rusty weathering micaceous quartzite and gray phyllite; local thin limey beds
Harlow Bridge Quartzite: Brown, biotite-bearing quartzites with tourmaline and zircon.

Moretown Formation

Moretown Formation: Blue-gray to green-gray, well-bedded laminated quartzite and micaceous schist, phyllitic quartzite, phyllite, and slaty phyllite, locally with graded bedding preserved; dominant mineralogy is muscovite, chlorite, quartz, albite, and opaques; minor lithologies include chalky-weathering feldspathic metawackes, sub-ophitic plagioclase-epidote-chlorite-calcite-quartz-albite-sphene greenstone, ankeritic greenstone, and quartz or albite porphyroblastic schist.

Carbonaceous member: Rusty-weathering dark gray phyllite, locally graphitic with minor beds and lenses of carbonaceous quartzite.

Gray quartzite member: Gray quartzite and metasiltstone with minor amounts of albite, muscovite, chlorite and tourmaline.

Stowe Formation

Stowe Formation (undifferentiated): Green to blue-green, fine- to medium-grained, muscovite-chlorite-quartz-albite schist, locally with magnetite, laminated pinstripe to wispy fabric with quartz veins, includes orange, pink and purple color variegated schists, spotted schists with pyrrhotite or ankerite, and deep orange weathering mylonites with blue-green amphibole as radiating bladed clusters.

Greenstone member: Strongly laminated, green to yellow-green, epidote-rich gneissic schists with epidote-quartz-chlorite knots and lenses, locally blastomylonitic with plagioclase; assemblages include epidote-muscovite-chlorite-magnetite, ankerite-plagioclase-muscovite-chlorite-magnetite, and epidote-muscovite-quartz-magnetite; minor strongly laminated, brick-red weathering, ankerite-rich greenstones, pale yellow-green phyllites, spotted magnetite granofels, and polydeformed, porphyroblastic, blue-black muscovite-albite-quartz-magnetite schist.

Serpentized ultramafic: Massive, magnetite-bearing serpentinite with relict olivine and orthopyroxene.

Ottauquechee Formation

Ottauquechee Formation: Strongly tectonized, rusty weathering, dark gray to black, graphitic, phyllitic schist with pyrite and/or pyrrhotite; locally silver-gray mylonite; local massive to laminar, dark to light gray, quartzite lenses and discontinuous layers with cross-cutting quartz veins, with chlorite and/or calcite.
GEOLOGIC SECTION ALONG THE SOUTHERN EDGE OF THE NORTHFIELD QUADRANGLE, VERMONT