

BEDROCK GEOLOGY OF THE MT. PAWTUCKAWAY QUADRANGLE, SOUTHEASTERN NH

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LITHOLOGIC UNITS

SO_{bg}

Gove member of the Berwick Fm: Well-foliated, silvery-gray, fine-grained, pelitic schist. Mineral assemblages include quartz, feldspar, white mica, biotite, staurolite, and garnet porphyroblasts, and trace amounts of sillimanite.

SO_{bc}

Unnamed member of the Berwick Fm: a purplish biotite-quartz-feldspar granofels with calc-silicate interlayers comprising up to 15% of the total outcrop and up to 50% locally.

SO_{bw}

"Watson Hill" member of the Berwick Fm: medium-grained pelitic schist occasionally interlayered with a flaggy, medium-grained biotite granofels and less frequently with calc-silicate layers. Mineral assemblages include quartz, plagioclase, muscovite, biotite, sillimanite, and garnet. Pelitic layers contain felsic pods on the centimeter to decimeter scale, with adjacent melanocratic rock..

SO_{bt}

"transition zone" of the Berwick Fm: migmatitized pelitic schist and biotite granofels intercalated with medium-grained, two-mica granite sills, two to ten meters wide, locally containing biotite stringers aligned parallel to the regional structure. Sills range from 10% of the outcrop in the south to 90% in the north.

Z_{mz}

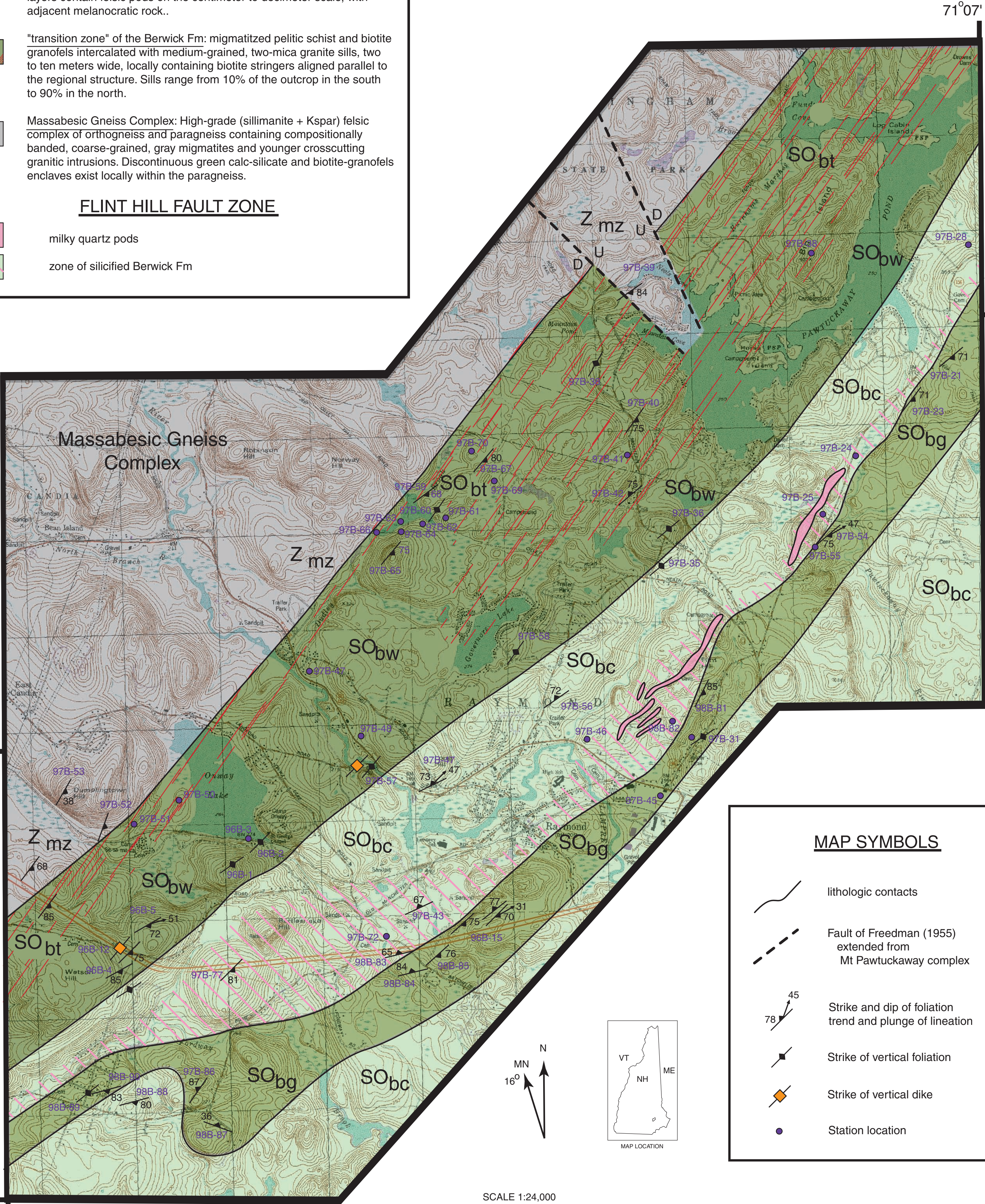
Massabesic Gneiss Complex: High-grade (sillimanite + Kspar) felsic complex of orthogneiss and paragneiss containing compositionally banded, coarse-grained, gray migmatites and younger crosscutting granitic intrusions. Discontinuous green calc-silicate and biotite-granofels enclaves exist locally within the paragneiss.

FLINT HILL FAULT ZONE

milky quartz pods

zone of silicified Berwick Fm

zone of silicified Berwick Fm



MAP SYMBOLS

- lithologic contacts
- Fault of Freedman (1955) extended from Mt Pawtuckaway complex
- Strike and dip of foliation trend and plunge of lineation
- Strike of vertical foliation
- Strike of vertical dike
- Station location