

IGNEOUS AND METAMORPHIC ROCKS

PERM- MISSISSIPPIAN

LOWER DEVONIAN

SILURIAN (?)

SILURIAN (?) or ORDOVICIAN (?)

CONTACTS

SYMBOLS

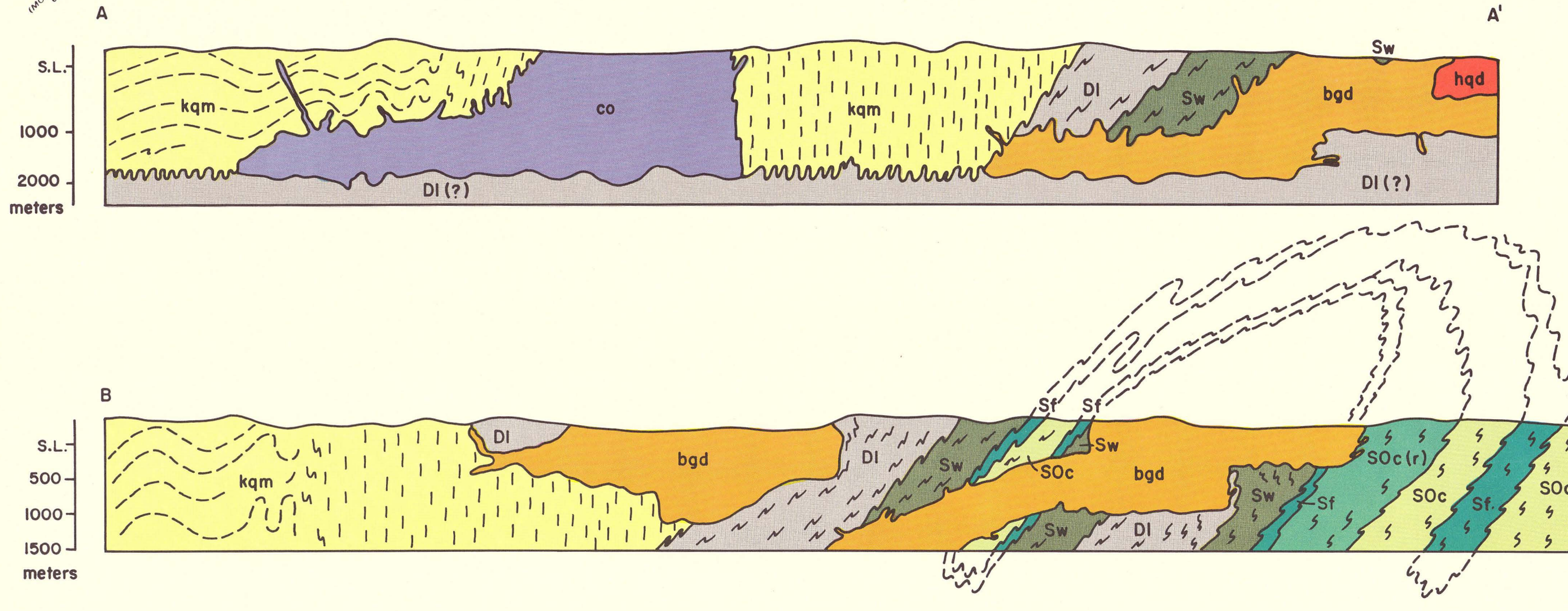
Legend:

- SZ** Silicified zone: Concentration of quartz
- co** Concord Granite: Medium-to coarse-grained; light gray; composition from muscovite-biotite tonalite to muscovite-biotite granite. Composed of muscovite, biotite, quartz, oligoclase, and microcline.
- ap** Aplite: Medium-grained leuco-granite. Composed of quartz, muscovite, microcline mesoperthite, and oligoclase, some garnet.
- bgd** Biotite Granodiorite: Medium-to coarse-grained; gray; composition from biotite granodiorite to biotite-muscovite granite. Foliated to massive. Composed of quartz, oligoclase-andesine, microcline perthite, biotite, some garnet.
- hqd** Hypersthene Quartz Diorite: Medium-grained; gray; hypersthene-biotite quartz diorite to biotite tonalite. Small areas of actinolite gabbro.
- kqm** Kinsman Quartz Monzonite: Porphyritic; gray; composition from granodiorite to granite. K feldspar megacrysts; garnet, biotite, or biotite after garnet.
- DI** Littleton Formation: Graded and rhythmically-bedded biotite-quartz granofels to biotite-sillimanite-quartz schist, also sillimanite-biotite-quartz schist.
- Sw** Warner Formation: Calc-silicate and biotite-plagioclase quartz granofels, also biotite-sillimanite quartz schist. Calc-silicate boudins and flecky gneisses common.
- Sf** Francetown Formation: Rusty-weathering graphite-pyrrhoite-plagioclase-quartz granofels, diopside, actinolite, muscovite, biotite, and microcline.
- SOc** Crooked Mtn. Formation: Graded and rhythmically-bedded biotite-quartz granofels to biotite-muscovite-sillimanite-quartz schist and units of quartz-sillimanite-biotite schist, SOc(r) is rusty-weathering.

CONTACTS: Accurate Contact (solid line), Indefinite Contact (dashed line), Inferred Contact (dotted line)

SYMBOLS:

- 30 / 70: Strike and dip of bedding
- 70 / 70: Strike and dip of bedding; stratigraphic tops known from primary sedimentary structures.
- 80 / 80: Strike and dip of overturned beds; stratigraphic tops known from primary sedimentary structures
- Vertical line: Strike of vertical bedding
- Vertical line with arrow: Strike of vertical foliation
- 25 / 25: Strike and dip of foliation
- Horizontal line: Horizontal foliation
- 37° 40' / 40': Foliation, with bearing and plunge of lineation
- 55° 60' / 60': Strike and dip of axial plane of minor fold with bearing and plunge of fold axis.
- Symbol: Abandoned graphite mine



GEOLOGIC MAP and STRUCTURE SECTIONS of the HILLSBORO QUADRANGLE, N. H.