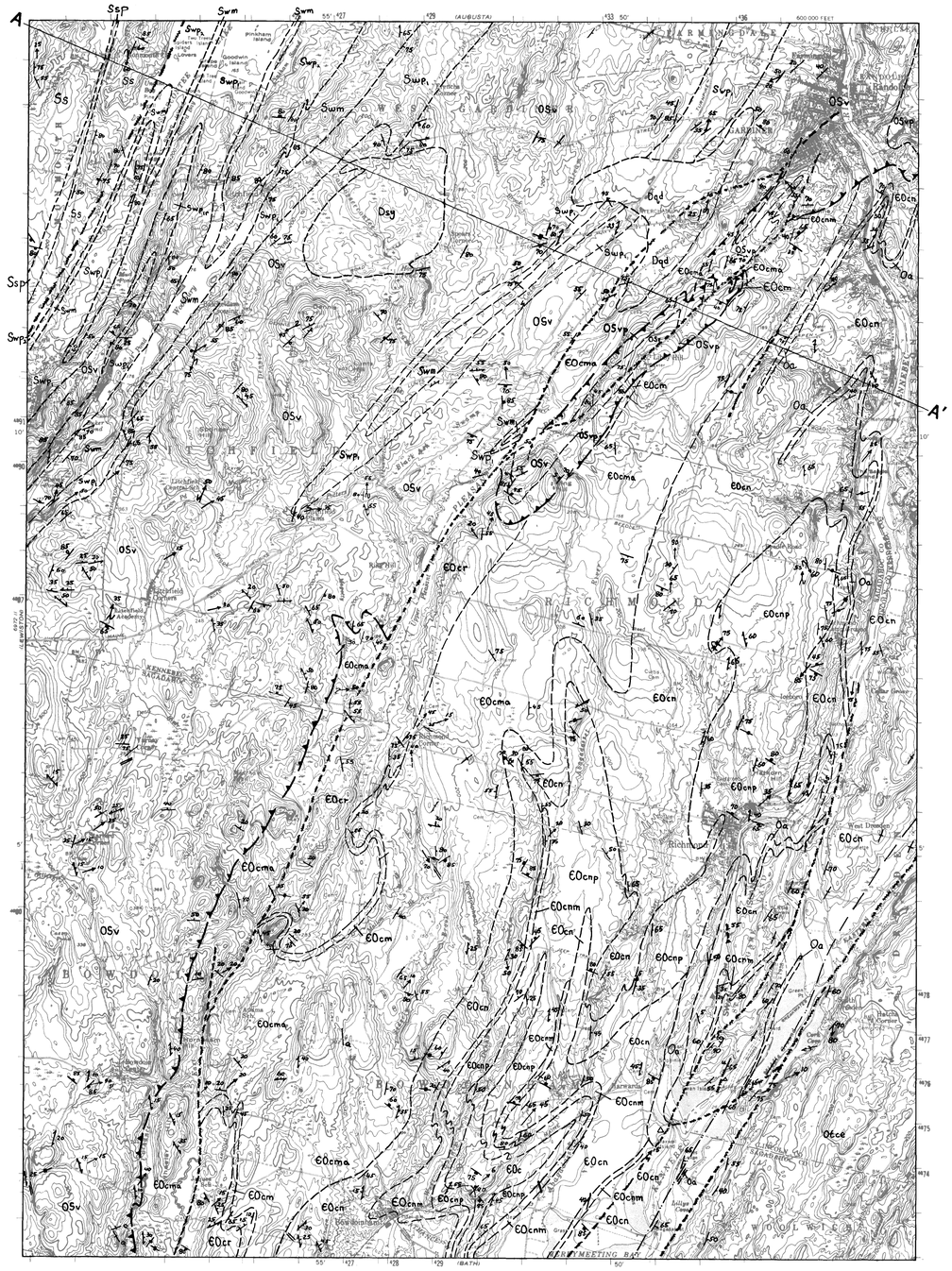
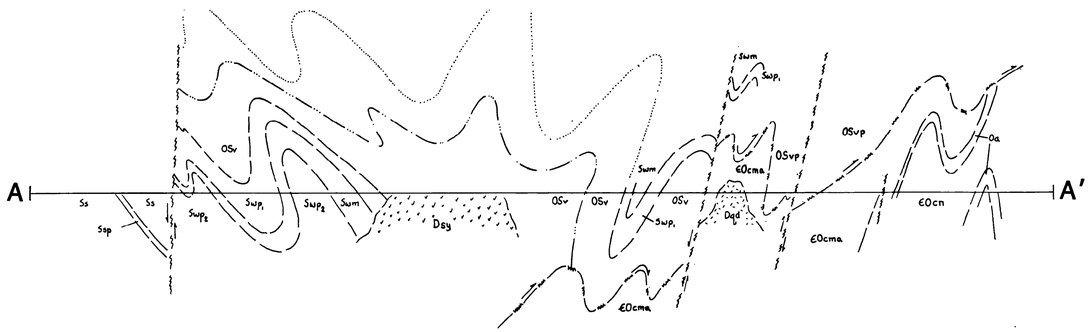




EXPLANATION

INTRUSIVE ROCKS

Dsy: Syenite

Dqd: Hornblende quartz diorite

Oa: Amphibolite. Massive hornblende amphibolite.

STRATIFIED ROCKS

SANGERVILLE FORMATION

Ss: Weakly graded, dominantly thick-bedded graywacke sandstone, with minor grit.

Ssm: Marble

Ssp: Patch Mountain Member: Thin-bedded calc-silicate granofels and marble.

WATERVILLE FORMATION

Swp_2: Pelitic schist. Thin to thick-bedded, quartz-veined, garnet-sillimanite schist with minor biotite granofels.

Swm: Marble

Swp_1: Biotite granofels. Thick-bedded biotite-garnet granofels with minor garnet-sillimanite schist; contains an interval of thick-bedded, rusty-weathering sillimanite schist (Swp_{1r}), as well as scattered intervals of calc-silicate granofels with local free calcite.

VASSALBORO FORMATION

OSv: Biotite granofels. Calcareous metasiltstone containing pods and lenses of calc-silicate granofels often spotted with rusty-weathering pyrite.

OSvp: Pelitic schist. Garnet-biotite-sillimanite-plagioclase-quartz schist. Sulfidic.

CAPE ELIZABETH FORMATION

Oce: Schist and quartzite. (Garnet)-muscovite-biotite schist and quartzite.

CUSHING FORMATION

€Oc: Biotite-muscovite granofels. Migmatized.

€Ocnp: Pelitic schist. Garnet-sillimanite-biotite-plagioclase-quartz schist. Rusty weathering, sulfidic and graphitic.

€Ocnm: Marble

€Ocn: Nehumkeag Pond Member. Feldspathic quartzite (meta-tuff?). Buff-weathering with thin wispy seams of mica.

€Ocma: Mt. Ararat Member. Biotite granofels. Non-rusty gray. Foliation surfaces spotted with randomly oriented hornblende. Includes thin intervals of amphibolite.

€Ocm: Marble (+/- rusty weathering pelite)

€Ocr: Richmond Corner Member. Garnet-biotite granofels, garnet-magnetite coticule, minor hornblende amphibolite.

SYMBOLS

Strike and dip of composition surface, inclined, overturned, vertical; (Topping sense from graded beds)

Strike and dip of foliation; inclined and vertical

Pitch of lineation in a foliation surface

Pitch of lineation in a composition surface (Foliation/composition intersection)

Strike and dip of joint: inclined and vertical

Pitch of slickensides on joint surface

Direction and plunge of minor fold axis

Dextral rotation sense, drag fold

Sinistral rotation sense, drag fold

Overturned anticline

Attitude of quartz vein

Attitude of pegmatite dike

Conformable contact

Unconformity

Shear zone or fault (△ breccia zone)

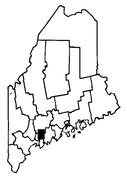
Thrust fault, teeth on upper plate

SCALE 1 62,500

1 ½ 0 1 2 3 4 MILES

3000 0 3000 6000 9000 12000 15000 18000 21000 FEET

1 .5 0 1 2 3 4 5 KILOMETERS



Quadrangle Location

RECONNAISSANCE

BEDROCK GEOLOGY OF THE GARDINER 15′ QUADRANGLE, MAINE

BY
DONALD W. NEWBERG
1982

Maine Geological Survey
DEPARTMENT OF CONSERVATION
Augusta, Maine 04333

Walter A. Anderson, State Geologist

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