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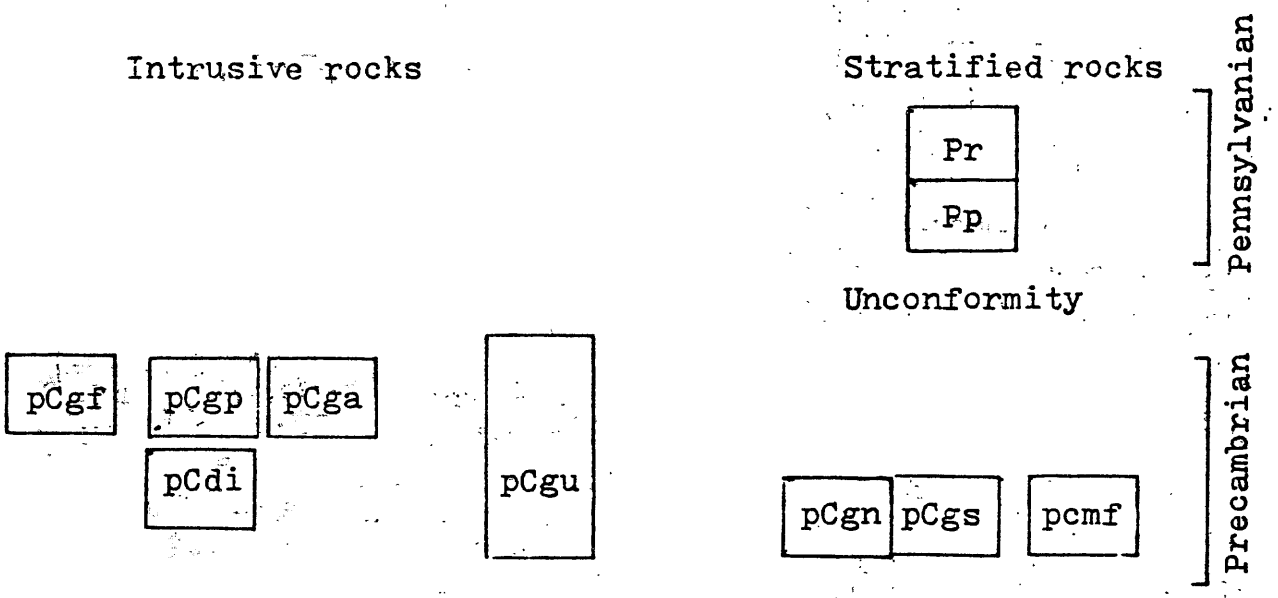
EXPLANATION

Correlation of Rock Units



Description of Rock Units

Pr Rhode Island Formation - Conglomerate, sandstone, graywacke, arkose, and shale; subordinate meta-anthracite. Fossil plants indicate a Pennsylvanian age

Pp Pondville Conglomerate - Conglomerate with abundant sandy matrix; pebbles are mainly quartzite, but some are granite and schist. Quartz-granule conglomerate south of Fall River (Quinn, 1971)

pCgf Granite of the Fall River pluton - Light gray to pale orange, non-foliated to weakly foliated biotite granite typically with albite and microperthite. Includes Bulgarmarsh Granite (Pollock, 1964) and mafic-poor phases not mapped separately

pCgp Porphyritic granite - Inequigranular to porphyritic, gray to dark gray granite and quartz monzonite typically containing phenocrysts or augen of microcline, accessory sphene, and a color index as high as 15. Increasingly gneissic from north to south. Includes Barefoot Hill Quartz Monzonite of Lyons (1977) and gneissic biotite granite in the Westport Point area.

pCga Alaskitic granite - Light gray to flesh-colored, medium-grained, gneissic, mafic-poor granite, typically with albite, microcline, and accessory biotite, muscovite, and magnetite in different proportions

pCdi Diorite and quartz diorite - Dark gray, medium-to coarse grained, massive, locally gneissic, hornblende diorite and quartz diorite; at Acushnet partly metamorphosed to amphibolite and hornblende gneiss

pCgu Granite, gneiss, and schist undivided - Plutonic and metamorphic rocks of Precambrian age. May include rocks of Paleozoic or younger age

pCgs Gneiss and schist - Layered gneiss, schist and granofels; layers differ in proportions of feldspars, quartz, hornblende, biotite, epidote and locally muscovite; rare amphibolite. In part metasomatized and thermally metamorphosed. Probably volcaniclastic in origin. Probably correlative with the Chlorite-biotite schist of Tiverton, Mica-chlorite schist of Sakonnet, and Mica schist of Bristol (see Quinn, 1971) but generally at higher metamorphic grade

pCgn Biotite gneiss - Granitoid, gray, layered biotite-quartz-two feldspar gneiss with layers differing in proportions of these minerals

pCmf Meta-felsite - Light gray-green, cleaved actinolite-bearing greenstone with relic "trachitic" texture. Probably meta-andesite or dacite

Description of map symbols

Contact; dashed where inferred, dotted where concealed

Fault; dashed where inferred, dotted where concealed

Trace of axial surface of foliation antiform

inclined vertical

20 Strike and dip of bedding

30 Strike and dip of foliation. Foliation most pervasive in southern part of area; in northern part varies in intensity from place to place and locally is coincident with shear zones

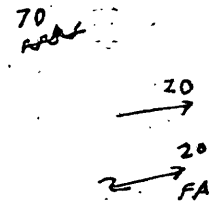
20 Strike and dip of foliation and compositional layering

70 Strike and dip of flow foliation

60 Strike and dip of cleavage or shear-fracture in granitic rock

70 Strike and dip of axial surfaces of minor folds of foliation

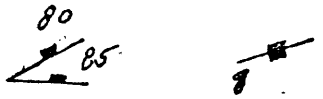
inclined vertical



Strike and dip of mylonite

Strike and plunge of lineation; mostly mineral lineation on biotite, quartz, feldspar, and hornblende; rarely axes of minor folds of foliation (FA); sense of fold shown where known

FIGURE 1 ONLY



Strike and dip of joints; q - quartz filled, e - epidote filled; location of observation in center of single symbols, at origin of clustered symbols

REFERENCES CITED

Koteff, Carl, 1964, Geology of the Assawompsett Pond quadrangle, Massachusetts: U.S. Geological Survey Geological quadrangle Map GQ-265

Lyons, P.C., 1977, Report on the bedrock of the Narragansett Basin, Massachusetts and Rhode Island: U.S. Geological Survey Open-File Report 77-816, 42 p., 24 pls., scale 1:31,250

Quinn, A.W., 1971, Bedrock geology of Rhode Island: U.S. Geological Survey Bulletin 1295, 68 p.

Pollock, S.J., 1964, Bedrock geology of the Tiverton quadrangle, Rhode Island - Massachusetts: U.S. Geological Survey Bulletin 1158-D, 16 p.

Williams, J.R. and Willey, R.E., 1973, Bedrock topography and texture of unconsolidated deposits, Taunton River Basin, southeastern Massachusetts: U.S. Geological Survey Miscellaneous Investigations Map I-742, 1:48,000