

EXPLANATION

eg

Esmond Granite
Light-pink medium-grained massive to foliated granite; composed chiefly of microcline, albite, quartz, biotite, and muscovite; minor constituents include chlorite, magnetite, garnet, and clinozoisite

sg

Scituate Granite Gneiss
Pink to flesh-colored medium- to coarse-grained distinctly foliated and lineated granite gneiss; composed chiefly of microperthite, quartz, albite-oligoclase, and biotite; minor and accessory constituents include muscovite, chlorite, epidote, magnetite, ilmenite, pyrite, garnet, zircon, and fluorite

hpg

Gneiss of Herring Pond vicinity
Light-gray to flesh-colored medium- to coarse-grained strongly lineated and locally foliated granite gneiss; composed chiefly of microcline, microperthite, oligoclase, quartz, and biotite; minor and accessory constituents include chlorite, epidote, magnetite, sphene, zircon, and apatite, garnet, fluorite, and allanite

pgnl

pgn

Ponaganset Gneiss
pgn, variable group of gneissic rocks; light gray to medium gray to dark gray, medium to coarse grained, porphyroblastic; locally, strongly foliated and lineated; composed in widely varying proportions of microcline, plagioclase varying from An₇₀ to An₃₀, quartz, biotite, and hornblende; minor and accessory constituents include chlorite, epidote, magnetite, ilmenite, garnet, sphene, zircon, and allanite
pgnl, lighter colored gneiss; contains more microcline and quartz; less plagioclase and biotite; finer grained in northernmost area

gr

Garnet rock
Contact between Ponaganset Gneiss and amphibolite; garnets as much as an inch across, staurolite, muscovite, biotite, hornblende, and quartz; minor amounts of oligoclase, chlorite, magnetite, ilmenite, and zircon

am

Amphibolite
Mostly dark-gray to medium-gray, but locally light-gray, medium- to fine-grained amphibolite; mostly massive in interior parts but streaky and schistose near contacts; composed chiefly of hornblende, biotite, plagioclase, clinozoisite, and quartz; minor constituents include chlorite, magnetite, ilmenite, pyrite, apatite, allanite, rutile, and zircon

bs

be

bq

ba

Blackstone Series
bs, Blackstone Series undivided; light- to dark-gray fine- to medium-grained quartzite, feldspathic quartzite, quartz-mica schist, biotite schist, and muscovite schist; locally contorted; main constituents in varying proportions are quartz, biotite, muscovite, microcline, and plagioclase; minor and accessory constituents include chlorite, epidote, zircon, hornblende, tremolite, garnet, staurolite, magnetite, ilmenite, pyrite, sphene, allanite, zircon, and fluorite
ba, light-gray fine-grained massive quartzite
bs, dark-gray medium- to coarse-grained schistose amphibolite
be, light-gray fine- to medium-grained massive rock composed almost wholly of light-gray epidote

fgn

Fine-grained gray gneiss
Gray to light-gray fine- to medium-grained foliated gneiss; composed chiefly of quartz, microcline, microcline-microperthite, plagioclase, biotite, and locally hornblende in porphyroblasts; minor and accessory constituents include muscovite, magnetite, zircon, apatite, allanite, and fluorite

adg

apgl

Absalom Formation
adg, gray to dark-gray medium- to coarse-grained foliated and lineated gneiss; conspicuous porphyroblasts of microcline and zoned oligoclase; composed chiefly of microcline, microperthite, oligoclase-albite, quartz, biotite, and hornblende; minor constituents include clinozoisite, sphene, magnetite, ilmenite, pyrite, garnet, a carbonate mineral, zircon apatite, and allanite
apgl, light-gray feldspathic gneiss; light-gray medium-grained granite gneiss; composed chiefly of microcline-microperthite, albite, and quartz; minor constituents include biotite, muscovite, sphene, zircon, a carbonate mineral, garnet, clinozoisite, magnetite, and allanite

ndg

Nipsachuck Gneiss
Gray to light tan fine- to medium-grained foliated gneiss, conspicuously lineated with biotite; main constituents are microperthite, albite-oligoclase, quartz, biotite, and muscovite; minor constituents include clinozoisite, chlorite, a carbonate mineral, magnetite, and zircon

o

Bedrock outcrops
Individual outcrops shown by solid color; areas of abundant outcrops shown by ruled pattern

Contact
Dashed where approximately located; short dashed where gradational or inferred; dotted where concealed

Fault, approximately located

Strike of vertical bedding

Inclined Vertical Horizontal

Strike and dip of foliation

Inclined Vertical

Strike and dip of parallel bedding and foliation

Coexisting planar features

Intersection is at point of observation

Inclined Horizontal

Bearing and plunge of lineation

May be combined with above symbols

Abandoned quarry

Durfee Hill gold mine

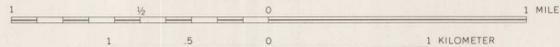
**BEDROCK GEOLOGIC MAP OF THE CHEPACHET QUADRANGLE
PROVIDENCE COUNTY, RHODE ISLAND**

Base by U.S. Geological Survey, 1955

Geology by A. W. Quinn, 1962-64;
south half by John F. Wosinski, 1956-57



SCALE 1:24 000



CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL



APPROXIMATE MEAN
DECLINATION, 1967

QUADRANGLE LOCATION

OLDER(?) GNEISSES
PRECAMBRIAN(?)
MISSISSIPPIAN(?) OR OLDER