



EXPLANATION

Qa Qd  
Alluvium Qa; dunes, Qd

td  
Dikes of various origins  
td, trachite  
ld, undifferentiated lamprophyre dikes  
dd, diabase or basaltic dikes

gr  
Granite; apite and pegmatite

hlg  
lg  
Hololeucocratic gneisses, hlg; leucocratic gneisses, lg, with the following textures  
mf, lenticular  
ms, poorly lenticular  
ml, laminated  
mm, migmatitic

mpg  
Mixed microcline gneiss and dark colored plagioclase biotite gneiss with the following textures  
ps, poorly lenticular  
pe, equigranular  
pm, migmatitic

gb  
Biotite garnet gneiss grading into:  
gg, garnet  
gs, sillimanite-cordierite  
gc, cordierite-sillimanite grading into:  
q, quartzite  
gch, charnockite  
gca, calc-silicate gneiss

gd  
Mafic and intermediate intrusives  
vv, granodiorite  
eg, equivalent gneiss of varying composition

ap  
at  
Lower series  
Aplite, pegmatite, and diabase metamorphosed  
gv, biotite-hornblende granite gneiss  
mi, migmatite  
Land fill areas

Contact  
Dashed where approximately located  
Zone of faults or fractures silicified  
Dashed where approximately located  
Inclined Vertical Horizontal  
Strike and dip of schistosity  
Soil sample

QUATERNARY  
JURASSIC TO TERTIARY  
CROZOCIAN AND SILURIAN  
PRECAMBRIAN

Geology and base from Mapa Geológico da Estado da Guanabara, scale 1:50,000, 1965; published by Departamento Nacional da Produção Mineral, Brazil

Geology by Reinhard Helmbold, Joel Gomes Valença, and Othon Henry Leonards, Jr., 1964-65; modified by Fred O. Jones, 1967

GEOLOGIC MAP OF THE CITY OF RIO DE JANEIRO, SHOWING LOCATIONS OF SOIL SAMPLES TAKEN FOR LIME TESTS

