

**EXPLANATION**

**SURFICIAL DEPOSITS**



Surficial Sedimentary deposits  
(only larger areas shown)

**VOLCANIC ROCKS**



Andesitic rocks of Mt. Vesudof  
(Basaltic andesite to latite flows;  
andesitic to rhyodacitic pyro-  
clastic beds)



Quartz-bearing olivine andesite flow



Recent volcanic rocks associated with minor vents  
Qr, basalt, andesite, and rare latite flows with  
vent debris, Qv, indicated by solid color within  
circle  
Qr, rhyolite domes



Hypersthene-bearing andesite  
rocks of Mt. Rechesnoi



Porphyritic mafic basalt flows  
(flows of satellite vents  
on flanks of major vol-  
canoes, includes minor areas  
of vent complex)



Basaltic rocks of northeastern Umnak  
(includes andesitic agglomerate and ash beds  
of the Okmok formation, which mantles the  
older basaltic rocks. Also includes very minor  
vitreous andesite and probably latite plugs and necks)

**METAMORPHIC AND PLUTONIC ROCKS**



Metavolcanic, metasedimentary, and plutonic rocks  
(Hydrothermally altered basaltic and andesitic rocks, silicified, potassium-metasomatized rocks, albitized  
intrusives, hornophyres, bedded argillite and tuff, and diorite-granophyre complex. Includes  
minor unaltered basic volcanic rocks, a few of which may be as young as early Quaternary.)

Probable fault

Strike and dip of beds  
A20  
↘50

Strike of vertical beds

Horizontal beds

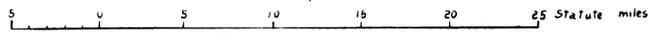
A, B, C, F

Letters designating cinder cones in Okmok caldera

2131 2255 2106  
Ocean depths in fathoms



Scale 1/300,000 (approx)



Contour interval: 500 feet above sea level  
100 fathoms (600 feet) below sea level

Base adapted after U.S. Coast and Geodetic Survey Chart 8861  
Geology by T. M. Byers, Jr.

**U. S. Geological Survey**  
**OPEN FILE REPORT**  
This report is preliminary and has  
not been edited or reviewed for  
conformity with Geological Survey  
standards or nomenclature.

PLATE I GENERALIZED GEOLOGIC MAP OF UMNAK AND BOGOSLOF ISLANDS AND VICINITY, SHOWING SUBMARINE TOPOGRAPHY