



EXPLANATION

SEDIMENTARY ROCKS

- QUATERNARY**
- Qsg**
Sand, gravel, and silt; unconsolidated materials including older stream and lake deposits, alluvium of the present streams, glacial moraines, and outwash gravels
 - Qm**
Morainal deposits
Unsorted materials; locally includes beds of stratified sand and gravel
 - Tn**
Neogene gravel
Loosely consolidated gravel and sand of gray, yellow, and buff color; locally tilted
 - Tc**
Coal-bearing beds
Interstratified sand, gravel, and clay; numerous beds of coal locally

- PERMIAN**
- P**
Limestone
 - Ps**
Shale, arkosic sandstone, and conglomerate, with basaltic flows and intrusives; may include infolded or imbricated Mesozoic beds
 - PCDv**
Chisna formation
Conglomerate, quartzite, and tuff

- CARBONIFEROUS**
- PCDv**
Undifferentiated Paleozoic rocks; chiefly Permian and Middle Devonian slate, argillite, and conglomerate, including a little volcanic material and intrusives; somewhat metamorphosed but only locally schistose; may include Carboniferous beds
 - Pd**
Limestone; possibly of Middle Devonian to Permian age
 - U**
Undifferentiated early Paleozoic or pre-Cambrian limestone
 - Uv**
Undifferentiated early Paleozoic or pre-Cambrian rocks; chiefly schist derived from argillaceous and quartzose rocks which were prevalently of siliceous nature

PREDOMINANTLY IGNEOUS ROCKS

- QUATERNARY**
- Qtw**
Wrangell lava
Lava flows and associated rocks of Tertiary to Recent age
 - g**
Granitic intrusives
Light-colored coarse-grained diorite, quartz diorite, and related intrusives; markedly porphyritic in places; predominantly of late Mesozoic age
 - Uv**
Undifferentiated amygdaloidal lava flows, diabase, and basalt, with intercalated tuffaceous and shaly beds; provisionally assigned to Permian and Triassic
 - U**
Undifferentiated igneous rocks of various kinds—dark-gray diorite, basic intrusives, lavas, and tuffs; late Paleozoic and Mesozoic
 - Pv**
Amygdaloidal basalts, tuffs, and intrusives of Permian age or older; may include some Permian shale or infolded Mesozoic rocks

- Contact, approximately located
- - - - - Fault, approximately located, dotted where concealed

MINES AND PROSPECTS

- ▲ Antimony
- ✕ Gold placer
- ✕ Prospect—gold, silver, lead, zinc

Base from Alaska Reconnaissance Topographic Series maps: Mt. Hayes, Gulkana, Nabesna, and Tanacross, sheets prepared by the U. S. Geological Survey, International Boundary Commission, and the U. S. Coast and Geodetic Survey. Edition of 1951.

Geology from original surveys by the Alaska Branch from 1902 to 1908, revised and correlated through field studies by Fred H. Moffit at intervals from 1929 to 1942, inclusive.

GEOLOGIC MAP OF THE EASTERN ALASKA RANGE AND ADJACENT AREA FROM THE TOK RIVER TO THE DELTA RIVER

