EXPLANATION

SEDIMENTARY ROCKS

QUATERNARY

Pleistocene and Recent

Qsg — Sand, gravel, and silt; unconsolidated materials including older stream and lake deposits, alluvium of the present streams, glacial moraines, and outwash gravel

TERTIARY

Tn — Nenana gravel
The deposits are poorly stratified, deeply weathered, and contain pieces of lignitized wood

CRETACEOUS

Upper Cretaceous

Kcs — Conglomerate, greenish-gray sandstone with shaly partings and plant remains, tuffaceous(?) sandstone, and sandy shales

JURASSIC

Upper Jurassic

Jc — Conglomerate and sandy shales

TRIASSIC

Upper Triassic

Tl — Massive and thin-bedded limestone; includes Nabesna limestone in White Mountain area

TrPu — Undifferentiated Upper Triassic and Permian limestone

PERMIAN

Pl — Limestone, crystalline in most places

Ps — Shale, arkosic sandstone, and conglomerate, with basaltic flows and intrusives; may include infolded or infaulted Mesozoic beds

PDl — Undifferentiated Permian and Devonian limestone

DEVONIAN

Middle and Upper Devonian

Dl — Limestone

Ds — Slate, quartzite, and conglomerate; locally schistose

Msa — Banded shale and argillite, arkosic s conglomerate, and limestone, of La sic and Early Cretaceous age; ma shale of Late Triassic age

MPu — Shale, argillite, and arkose; undiffe Permian and Mesozoic(?) rocks wit flows or intrusives, distinctly be showing banding or varves in ma finer-textured, darker strata. T Permian rocks are at the head of Fork Snag River

PCDu — Undifferentiated Paleozoic rocks, cl mian and Middle Devonian slate and conglomerate, including volc rial and intrusives; somewhat phosed but only locally schistose; n Carboniferous rocks

ui — Undifferentiated early Paleozo pre-Cambrian limestone

us — Undifferentiated early Paleozoic o brian rocks; chiefly schist deriv part from sedimentary beds that inantly quartzose, though loca ceous, and in lesser amount fr rocks

sp — Schist and phyllite with granular derived in part from sedimentar

PREDOMINANTLY IGNEOUS ROCKS

CENOZOIC

QTw — Wrangell lava
Basaltic and andesitic lava flows, tuffs, and agglomerate of Tertiary to Recent age; some of the fragmental materials were deposited in water and are well rounded

MESOZOIC

gr — Granitic intrusives
Light to dark-colored, coarse-grained diorite, quartz diorite, and related intrusives; markedly porphyritic in places and showing large feldspar phenocrysts, predominantly of late Mesozoic age

ui — Undifferentiated igneous rocks of late Paleozoic and Mesozoic age; dark-gray diorite, basic intrusives, lavas, and tuffs, metamorphosed in places; locally may include infolded or infaulted sediments

PALEOZOIC

Pv — Amygdaloidal basalts, tuffs, and intrusives of Permian age or older; may include some Permian shale or infolded Mesozoic rocks

PDb — Mainly Permian basaltic rocks, tuffs, and agglomerates; includes some Devonian shale and limestone and possibly some Mesozoic deposits

gb — Gabbro
Age undetermined

Contact, approximately located

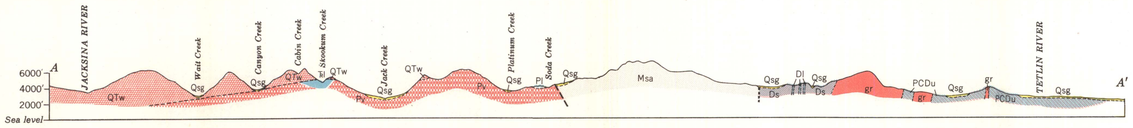
Fault, approximately located, dotted where concealed

MINES AND PROSPECTS

- Copper
- Gold lode
- Gold placer
- Molybdenum
- 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 AND SECTION OF THE EASTERN ALASKA RANGE AND ADJACENT AREA FROM THE INTERNATIONAL BOUNDARY TO THE TOK RIVER

Scale 1:250,000

5 0 20 Miles

Contour interval 200 feet
Datum is mean sea level

INTERIOR-GEOLOGICAL SURVEY, WASHINGTON, D. C.