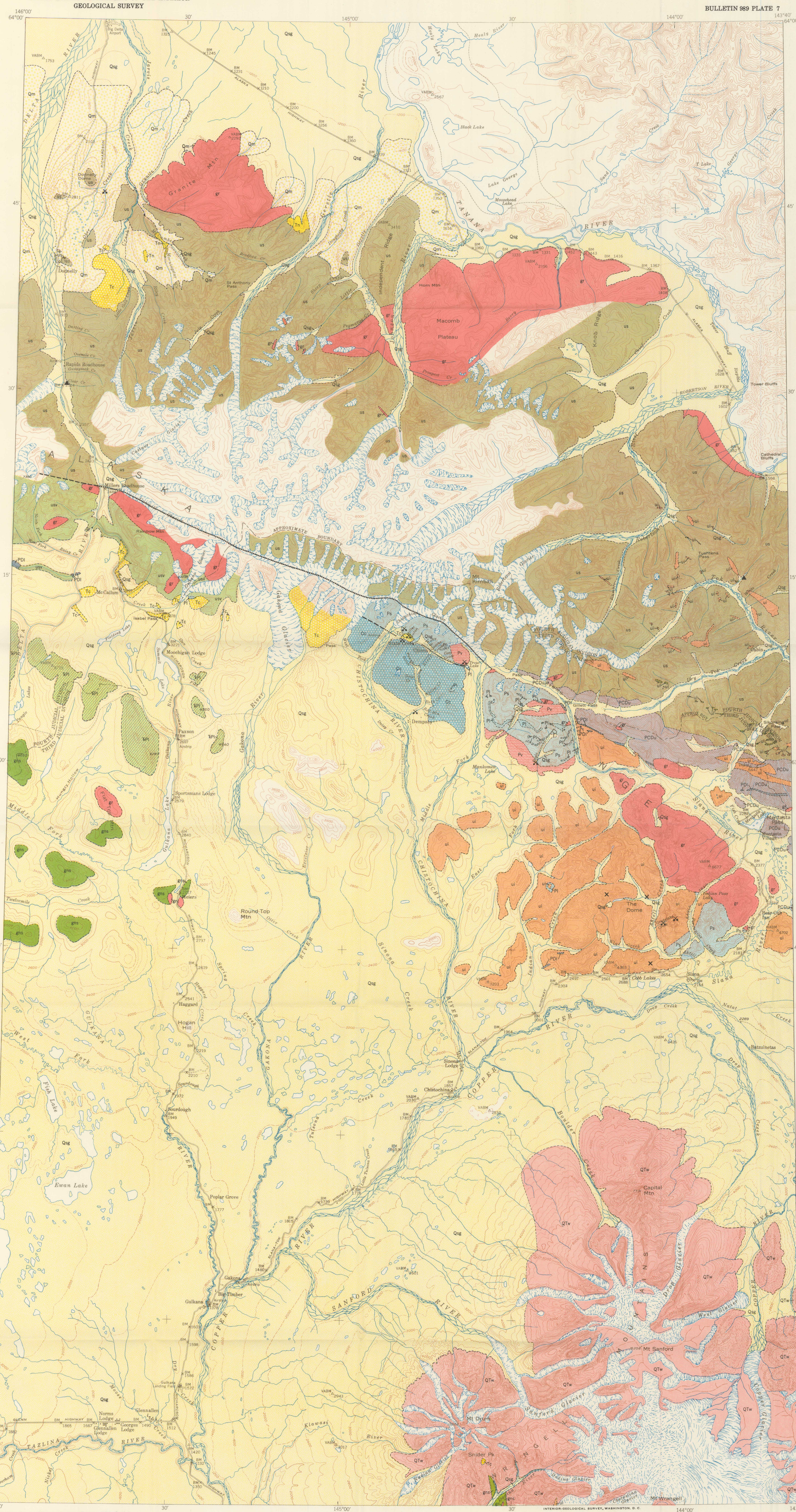
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



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

Scale 1:250,000

5 0 20 Miles

Contour interval 200 feet
Datum is mean sea level

EXPLANATION

SEDIMENTARY ROCKS

CENOZOIC — 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

Qm — Morainal deposits
Unsorted material; locally includes beds of stratified sand and gravel

CENOZOIC — TERTIARY

Tn — Nenana 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

MESOZOIC — PALEOZOIC

usv — Undifferentiated sedimentary rocks with interstratified volcanic rocks and many intrusives of Middle Devonian to Late Triassic age; chiefly hard limy argillite, hard sandy or tuffaceous beds, limy grit and conglomerate, limestone, sandstone or quartzite, volcanic breccias, and limy tuff; many intrusive dikes and sills; fossiliferous

gns — Greenstone, schist, and limestone, with basic and dioritic intrusives of Middle Devonian to Late Triassic age; may be equivalent in part to the Chisna formation

PALEOZOIC — PERMIAN

Pl — Limestone

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

PALEOZOIC — CARBONIFEROUS (Mississippian)

Cc — Chisna formation
Conglomerates, quartzite, and tuff

PALEOZOIC

PCDu — 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

PDl — Limestone; possibly of Middle Devonian to Permian age

PRE-CAMBRIAN OR PALEOZOIC(?)

ul — Undifferentiated early Paleozoic or pre-Cambrian limestone

us — Undifferentiated early Paleozoic or pre-Cambrian rocks; chiefly schist derived from argillaceous and quartzose rocks which were prevailingly of siliceous nature

PREDOMINANTLY IGNEOUS ROCKS

CENOZOIC

QTw — Wrangell lava
Lava flows and associated rocks of Tertiary to Recent age

MESOZOIC

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

PALEOZOIC

TRPl — Undifferentiated amygdaloidal lava flows, diabase, and basalt, with intercalated tuffaceous and shaly beds; provisionally assigned to Permian and Triassic

ui — 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