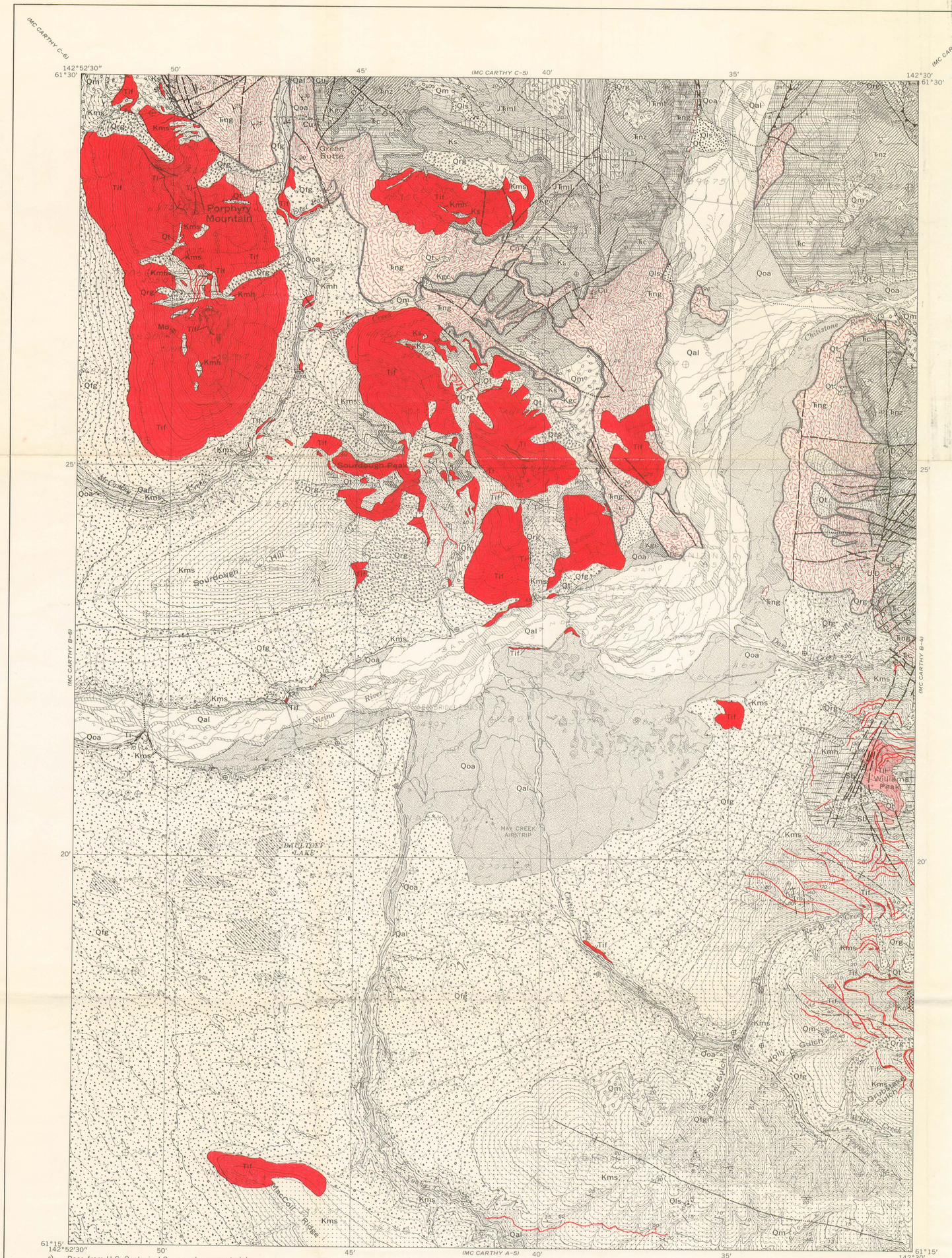
McCarthy B-5

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

MISCELLANEOUS GEOLOGIC INVESTIGATIONS
MAP I-438



Base from U.S. Geological Survey advance material of McCarthy B–5 quadrangle, 1963

Geology mapped by E. M. MacKevett, Jr. and R. L. Applegate, 1964

EXPLANATION

QUATERNARY

Qal / Qoa — Alluvium
Qal, *alluvium deposited along present flood plains of streams and supporting little or no vegetation*
Qoa, *older alluvium mainly occupying vegetation-covered benches above present stream levels*

Qls / Qt — Landslide and talus
Qls, *landslides, characterized by hummocky surfaces underlain by disarrayed angular blocks*
Qt, *talus and colluvium*

Qrg / Qfg / Qm — Glacial, fluvioglacial, and related deposits
Qrg, *rock glaciers, including both young and mature types*
Qfg, *fluvioglacial deposits commonly stratified, poorly consolidated sand, silt, pebbles, and boulders; formed by deposition during the recession of large glaciers*
Qm, *moraines composed of till and similar unsorted and unstratified poorly consolidated deposits*

TERTIARY

Tif / Ti / Tii — Epizonal intrusive rocks
Commonly form small plutons and dikes
Tif, *chiefly fine-grained felsic intrusive rocks, locally porphyritic, commonly buff to light gray*
Ti, *fine-grained intrusive rocks of intermediate composition, light greenish gray and greenish gray*
Tii, *medium-grained intrusive rocks, chiefly granodiorite*

UNCONFORMITY

CRETACEOUS

Upper Cretaceous

Kc — Conglomerate
Conglomerate and minor coarse-grained sandstone; mainly composed of clasts of older Cretaceous rocks

Kms / Kmh — Mudstone, shale, and hornfels
Kms, *chiefly dark-gray mudstone and shale, minor siltstone and sandstone; local limestone, commonly lenticular or as concretions; cut by sandstone dikes*
Kmh, *rocks of mudstone and shale unit* (Kms) *that have been converted to hornfels*

Lower and Upper Cretaceous

Ks — Sandstone and siltstone
Mainly light-brown-weathering fine-grained sandstone and siltstone; subordinate shale

Lower Cretaceous

Kgc — Greensand and conglomerate
Basal conglomerate overlain by coarse- to fine-grained greensand and minor shale

UNCONFORMITY

TRIASSIC AND JURASSIC

Upper Triassic(?) and Lower Jurassic

JTrmu / JTrml — McCarthy Formation
JTrmu, *upper member; limestone and siliceous limestone mainly consisting of calcite clasts, many of organic derivation, in a chalcedonic matrix*
JTrml, *lower member; dark-gray to black carbonaceous limestone with subordinate sandstone, siltstone, shale, and microcrystalline limestone*

TRIASSIC

Upper Triassic

Rnz — Nizina Limestone
Medium-gray, thin- to medium-bedded limestone with subordinate chert lenses and nodules

Rc — Chitistone Limestone
Light- to medium-gray limestone that is generally thick bedded; contains crystalline limestone, calcarenite, and subordinate dolomite, minor chert nodules

Middle and (or) Upper Triassic

Rng — Nikolai Greenstone
Dark greenish-gray to greenish-brown basalt in flows between 2 and 30 feet thick; commonly amygdaloidal, partly chloritized

Contact, showing dip
Dashed where approximately located; short dashed where gradational; dotted where concealed

Fault, showing dip
Dashed where approximately located; dotted where concealed. U, *upthrown side;* D, *downthrown side*

Thrust fault
Dashed where approximately located; dotted where concealed. Sawteeth on upper plate

Anticline, showing crestline
Dashed where approximately located; dotted where concealed

Overturned anticline, showing direction and dip of limbs
Dashed where approximately located; dotted where concealed

Syncline, showing troughline
Dashed where approximately located; dotted where concealed

Strike and dip of beds or flows

Strike and dip of overturned beds

Horizontal beds

Lode mine or prospect
Cu---*copper*
Mo---*molybdenum*
Sb---*antimony*

Placer gold camp, approximately located

REFERENCES

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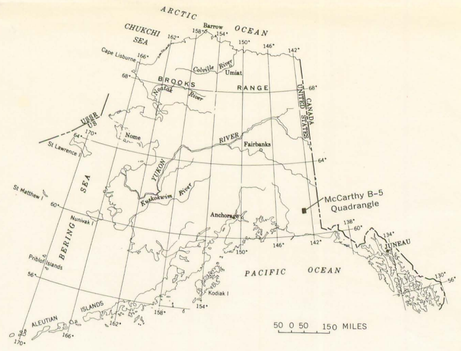

INDEX MAP SHOWING LOCATION OF AREA

PRELIMINARY GEOLOGIC MAP OF THE MCCARTHY B-5 QUADRANGLE, ALASKA

By

E. M. MacKevett, Jr.

SCALE 1:63 360

1 ½ 0 1 2 3 4 5 MILES

1 .5 0 1 2 3 4 5 KILOMETERS

CONTOUR INTERVAL 100 FEET
DATUM IS MEAN SEA LEVEL

1965

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1965—G65263

For sale by U.S. Geological Survey, price 50 cents