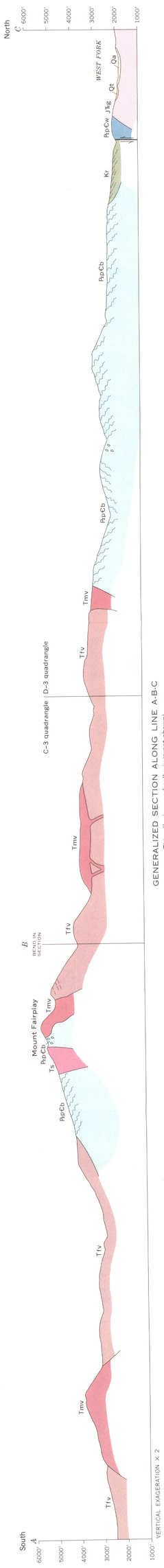
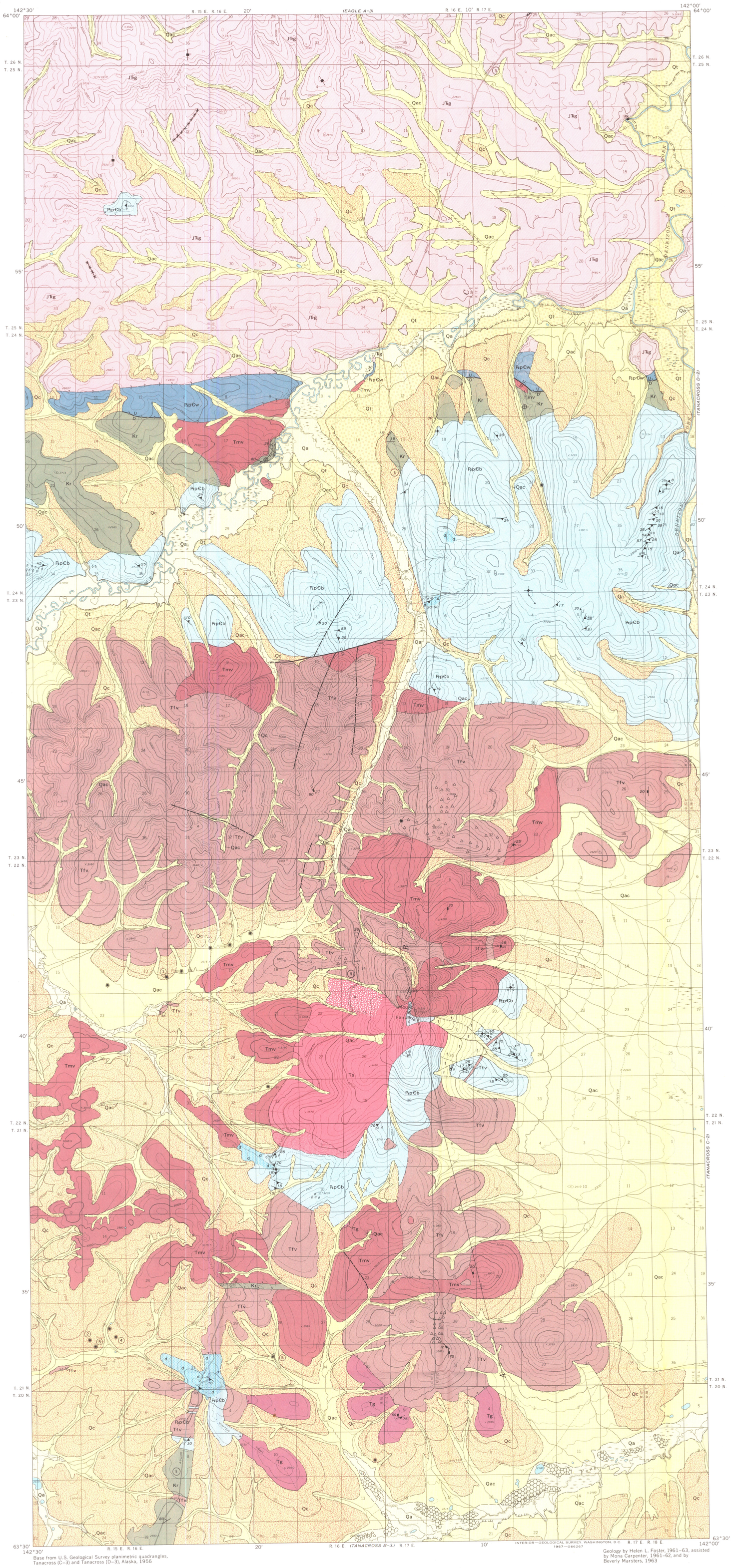


GENERALIZED SECTION ALONG LINE A-B-C
(Thin alluvium and colluvium not shown)



Base from U.S. Geological Survey planimetric quadrangles, Tanacross (C-3) and Tanacross (D-3), Alaska, 1956

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.
1967—G66267

Geology by Helen L. Foster, 1961–63, assisted by Mona Carpenter, 1961–62, and by Beverly Marsters, 1963

EXPLANATION

UNCONSOLIDATED DEPOSITS

Qa — Floodplain and low terrace alluvium
Well-rounded gravel, sand and silt in stratified deposits; boulders abundant in places; local surface accumulations of organic material

Qac — Alluvium and colluvium of small stream valleys, alluvial fans, and broad slopes
Silt, sandy silt, and carbonaceous silt containing layers and lenses of sand and gravel. Scattered boulders and local deposits of organic material. Material angular to well rounded; unstratified to stratified; unsorted to sorted

Qc — Colluvium and residual material on mountain slopes and ridges
Unsorted and angular debris ranging from coarse rubble to silt size. Includes some windblown silt and ash and residual rock debris

Qt — High terrace alluvium of larger streams
Massive to poorly stratified layers and lenses of sand, gravel, and silt; boulders present in places. Mostly well sorted

QUATERNARY — CENOZOIC

IGNEOUS ROCKS

Tmv — Mafic volcanic rocks
Dominantly dark-colored andesitic lava, tuff, tuff-breccia, and breccia

Tfv — Felsic volcanic rocks
Dominantly light-colored rhyolitic and dacitic tuff, lapilli tuff, tuff-breccia, breccia, volcanic conglomerate, and lava. Welded tuff is abundant.
Triangular overprint; volcanic rocks without quartz phenocrysts and less silicic than surrounding volcanic rocks

Tg — Granite
Pink fine- to coarse-grained equigranular and porphyritic granitic rock

Ts — Syenite of Mount Fairplay intrusive
Equigranular to coarsely porphyritic hornblende-biotite syenite. Locally monzonite or adamellite in composition
D, *coarse-grained porphyritic phase*
Dotted overprint, zone in which rock texture grades from coarse-grained intrusive type to fine-grained extrusive type

TERTIARY(?) — CENOZOIC

SEDIMENTARY ROCKS

Kr — Detrital rocks
Interbedded conglomerate, sandstone, shale, siltstone, tuff, and carbonaceous shale. Local chert and lignite

CRETACEOUS(?) — MESOZOIC

JTRg — Granodiorite of the Taylor Mountain batholith
Medium- to coarse-grained equigranular granodiorite. Locally includes quartz diorite and diorite

TRIASSIC(?) OR JURASSIC(?) — MESOZOIC

METAMORPHIC ROCKS

PpCw — Metamorphic rocks of the West Fork vicinity
White and pink marble, impure quartzite, and quartz-feldspathic hornfels

PRECAMBRIAN(?) OR PALEOZOIC(?)

PpCb (d, d) — Birch Creek Schist
Quartz-biotite gneiss and schist, augen gneiss, amphibolite, spotted gneiss, quartz schist, tremolite-actinolite schist, and mica schist
d, *intense network of small dikes*

PRECAMBRIAN OR PALEOZOIC

Contact
Long-dashed where approximately located or inferred; queried where doubtful; short-dashed where gradational

Fault
Long dashed where approximately located; queried where doubtful. U, *upthrown side;* D, *downthrown side*

Fault or lineament from aerial photographs
Not checked or identified on the ground

Minor folds, axes horizontal

Minor folds
Showing plunge of axes

Strike and dip of beds

Horizontal beds

Strike and dip of foliation

Horizontal foliation

Strike and dip of joint

Strike of vertical joints

Dike

Pingo or pingos
Number locates specific pingo mentioned in text

Outcrop of augen gneiss

Terrace scarp

Ice-wedge polygons

High altitude alluvial fan

GEOLOGIC MAP OF MOUNT FAIRPLAY AREA, ALASKA

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
DOTTED LINES REPRESENT 50-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL