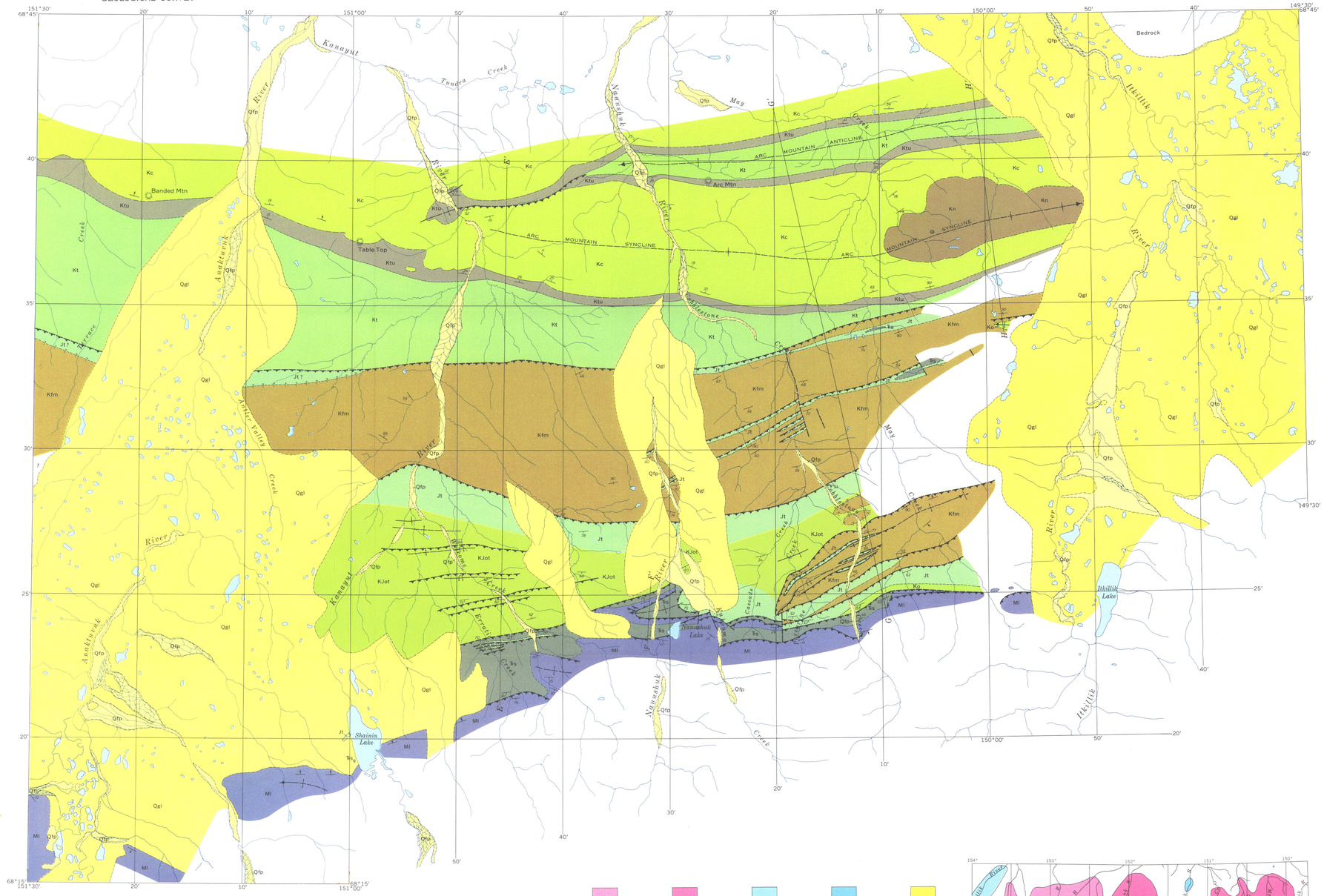
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PROFESSIONAL PAPER 303-G
PLATE 50 (EAST HALF)



Base by Branch of Special Maps
U.S. Geological Survey

W.W. Patton and I. L. Tailleur, 1949

W.W. Patton and A. S. Keller, 1950

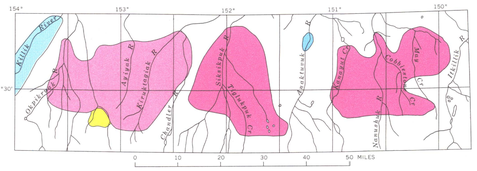
R. L. Detterman and R.S. Bickel, 1953

R. E. Fellows, R.M. Chapman, and C.T. Bressler, 1945

W.W. Patton, W.P. Brosgé, and M.D. Mangus, 1961

Data based principally upon field mapping

Data interpreted from aerial vertical photographs
Scale 1:20,000



SOURCE OF GEOLOGIC DATA

EXPLANATION

ROCKS

QUATERNARY

Recent

Qfp — Flood-plain deposits
Gravel, sand and silt of fluvial origin; locally include lacustrine silt deposits

Pleistocene

Qgl — Glacial deposits
Chiefly till, locally includes outwash deposits; unweathered and very slightly modified by stream erosion

Qug — Upland gravel deposits
Gravel, probably glacial outwash; mantles remnants of high-level preglacial surface

UNCONFORMITY

CRETACEOUS

Upper Cretaceous

Nanushuk Group

Kn — Ninuluk Formation
Fine-grained light-gray sandstone; marine

Kc — Chandler Formation
Light-gray to yellowish-orange sandstone and conglomerate, siltstone, shale, and coal; dominantly nonmarine

Ktu — Tuktu Formation
Greenish-gray fine-grained sandstone and some siltstone and shale; marine

Lower Cretaceous

Kfm — Fortress Mountain Formation
Greenish-gray sandstone and conglomerate of graywacke type, shale, and siltstone

UNCONFORMITY

Ko — Okpikruak Formation
Greenish-gray sandstone of graywacke type, shale, and siltstone; conglomerate at base locally

UNCONFORMITY

Kft — Fortress Mountain and Torok Formations, undifferentiated

KJot — Okpikruak and Tiglukpuk Formations, undifferentiated
Locally may include small areas of Ml, Ps, Trs, *and* Ji

Kt — Torok Formation
Shale and siltstone; sandstone lenses locally

JURASSIC

Upper Jurassic

Mafic igneous rocks
Fine-grained mafic intrusive and extrusive rock, chiefly diabase

Jt — Tiglukpuk Formation
Locally may include small areas of Ml, Ps, Trs, Ji, *and* Ko. *Dominantly greenish-gray sandstone of graywacke type, shale, and siltstone; near base subordinate chert, siliceous shale, variegated shale and siltstone, and conglomerate; tuffaceous sandstone and siliceous siltstone locally*

UNCONFORMITY

TRIASSIC

Lower(?), Middle, and Upper Triassic

Trs — Shublik Formation
Dark shale, chert, and limestone

UNCONFORMITY (?)

TrPss — Shublik and Siksikpuk Formations, undifferentiated

PERMIAN(?)

Ps — Siksikpuk Formation
Variegated shale and siltstone, locally siliceous

UNCONFORMITY

MISSISSIPPIAN

Lower and Upper Mississippian

Ml — Lisburne Group
Dominantly limestone, some dolomite, chert and shale

CARBONIFEROUS

Contact
Dashed where approximately located, short dashed where indefinite or inferred, queried where doubtful

Fault
Dashed where approximately located or inferred

Thrust or reverse fault
Dashed where approximately located or inferred. Sawteeth on the upthrown side. At some places this symbol represents a zone of numerous closely spaced faults of small individual displacement

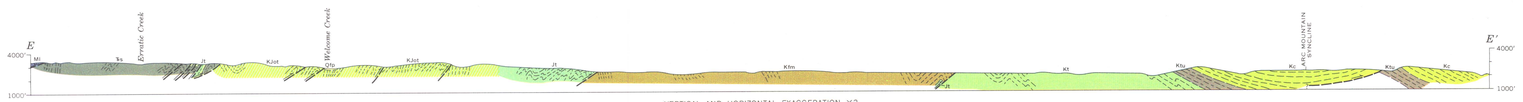
Anticline
Showing trace of axial plane and direction of plunge. Dashed where approximately located

Syncline
Showing trace of axial plane and direction of plunge. Dashed where approximately located

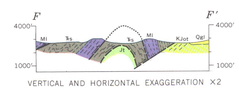
Overturned anticline
Showing trace of axial plane and direction of plunge. Dashed where approximately located

Strike and dip of beds | Strike and dip of overturned beds | Strike of vertical beds | Horizontal beds
BASED ON FIELD MEASUREMENTS

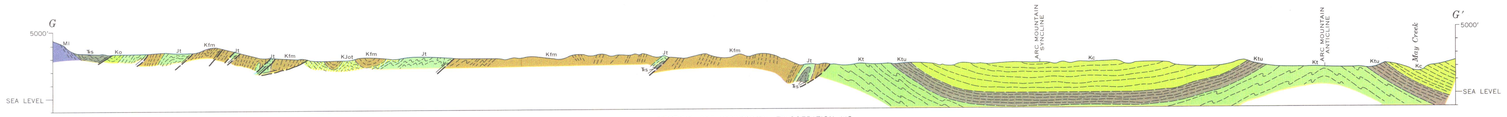
Strike and dip of beds | Horizontal beds
BASED ON INTERPRETATION OF AERIAL PHOTOGRAPHS



VERTICAL AND HORIZONTAL EXAGGERATION ×2



VERTICAL AND HORIZONTAL EXAGGERATION ×2



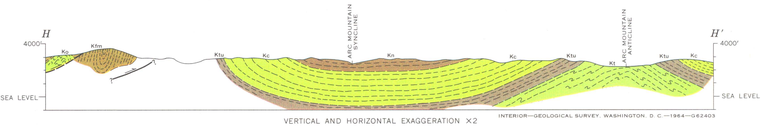
VERTICAL AND HORIZONTAL EXAGGERATION ×2

SCALE 1:125 000

2 0 2 4 6 8 10 MILES

2 0 2 4 6 8 10 KILOMETERS

DATUM IS MEAN SEA LEVEL



VERTICAL AND HORIZONTAL EXAGGERATION ×2

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1964—G62403

RECONNAISSANCE GEOLOGIC MAP AND GENERALIZED SECTIONS OF THE KILLIK-ITKILLIK REGION, ALASKA