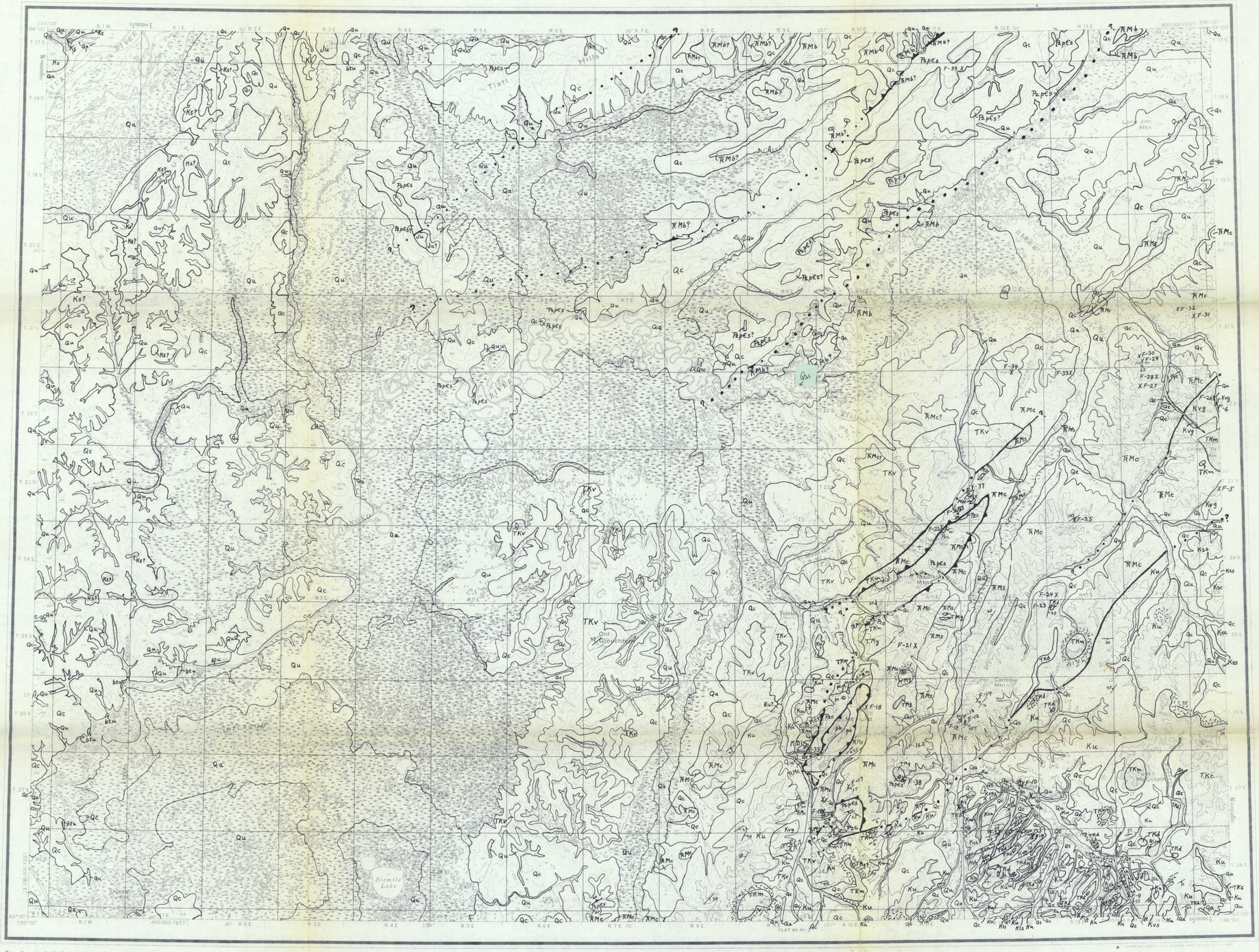
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

OPEN-FILE REPORT

85-203

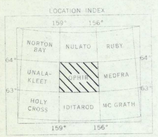


Base from U. S. Geological Survey 1:250,000
Alaska topographic series: Ophir, 1954.

SCALE 1:250 000

5 0 5 10 15 20 MILES

5 0 5 10 15 20 25 30 KILOMETERS



AREA OF MAP

Field mapping by R. M. Chapman, 1974,1977,1980-1981; W.W.Patton, Jr., 1960,1974,1978,1979,1980-1981; E. J. Moll,1980-1981; T. K. Bundtzen and G. M. Laird (1980) 1978-1979. Map compiled by R. M. Chapman and W. W. Patton, Jr., 1984.

CORRELATION OF MAP UNITS

UNCONSOLIDATED DEPOSITS

Qa, Qu, Qc, Qt — Holocene; Pleistocene — QUATERNARY

Unconformity

BEDROCK

TKv, TKc, TKm, TKd — Early Tertiary and Late Cretaceous — TERTIARY AND CRETACEOUS

Unconformity

Ku, Ks, Ksc, Kss, Kls, Kac, Kvs, Ksa, Ksh, Kvg — Late Cretaceous; Early Cretaceous — CRETACEOUS

TMg — TERTIARY TO LATE MISSISSIPPIAN

Unconformity

Ju — Late Jurassic — JURASSIC

TrMs, TrMc — TRIASSIC, PERMIAN, PENNSYLVANIAN, AND MISSISSIPPIAN

MDl — MISSISSIPPIAN TO DEVONIAN

Basalt(?)

Pzc, PzpCs — EARLY PALEOZOIC; LATE PRECAMBRIAN(?)

ph*, pc*, btu* — AGE UNCERTAIN

* Relations uncertain

DEFINITION OF MAP UNITS

UNCONSOLIDATED DEPOSITS

- Qa — Alluvium
- Qu — Undifferentiated lowland silt, sand, muck, and gravel
- Qt — Terrace alluvium
- Qc — Colluvium

BEDROCK

Igneous rocks

- TKv — Volcanic rocks
- TKc — Mafic to intermediate volcano-plutonic complex
- TKm — Monzonite
- TKd — Dikes and subvolcanic rocks
- TMg — Gabbro
- Ju — Ultramafic rocks
- ph — Harzburgite tectonite of Mount Hurst
- pc — Cumulate ultramafic rocks of Mount Hurst

Sedimentary and metamorphic rocks

- Ks — Sandstone, shale, and conglomerate
- Ku — Undifferentiated clastic rocks
- Ksc — Sandstone and conglomerate
- Kss — Fine sandstone, siltstone, and shale
- Kls — Limy volcaniclastic sandstone
- Kac — Agglomerate, chert, tuff, and sandstone
- Kvs — Volcaniclastic sandstone
- Ksa — Sandstone
- Ksh — Shale and siltstone
- Kvg — Volcanic graywacke and conglomerate
- TrMs — Sandstone, grit, and argillite
- TrMc — Chert, argillite, and volcaniclastic rocks
- TrMb — Basalt, gabbro, and chert
- MDl — Limestone
- Pzc — Carbonate rocks
- PzpCs — Schistose metamorphic rocks
- btu — Bedrock type unknown

EXPLANATION OF MAP SYMBOLS

- Zone of hornfels
- Contact, approximately located
- Fault, interpreted; dotted where inferred beneath cover
- Thrust fault, interpreted; dotted where inferred beneath cover; teeth are on upper plate
- 20 Strike and dip of beds. May include some overturned beds
- 50 Strike and dip of beds, estimated from distant observations or photointerpretation
- 20 Strike and dip of foliation
- X F-1 Site and number of fossil occurrence (table 1)

RECONNAISSANCE GEOLOGIC MAP OF THE OPHIR QUADRANGLE, ALASKA

By

Robert M. Chapman, William W. Patton Jr., and Elizabeth J. Moll

1985

This map is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.