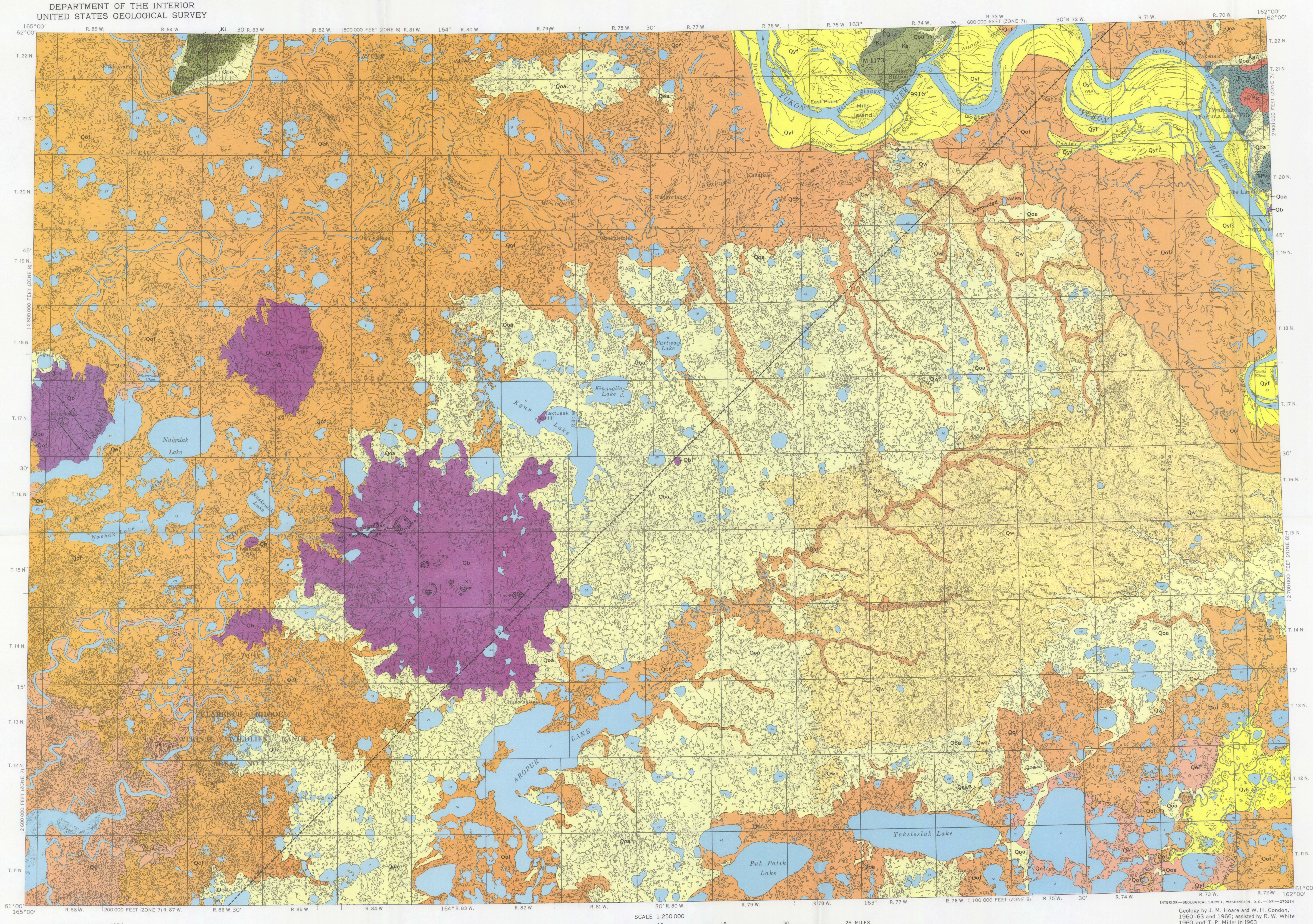
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

MISCELLANEOUS GEOLOGIC INVESTIGATIONS
MAP I–668



EXPLANATION

SURFICIAL DEPOSITS

QUATERNARY

Qyf — Young flood-plain deposits
Silt and sandy silt; minor sand and gravel

Qe — Estuarine deposits
Silt and sandy silt

Qof — Old flood-plain deposits
Silt and sandy silt

Qw — Wind-blown deposits
Silt and sandy silt

Qoa — Old alluvial deposits
Chiefly silt and sandy silt with sand and gravel at depth. Includes terrace and colluvial deposits near mountains

BEDROCK

QUATERNARY

Qb — Basalt
Undeformed flows and associated cones and craters. Includes much pyroclastic rock

CRETACEOUS

Ki — Intrusive rhyodacite, dacite, and aplite
Forms small, light- to dark-gray, fine-grained porphyritic dikes and sills

Kg — Granitic rocks
Light-gray, medium-grained, weakly foliated rocks

Ks — Noncalcareous sandstone
Interbedded fine- to medium-grained gray noncalcareous sandstone and siltstone. Includes both marine and nonmarine strata. Biotite-hypersthene hornfels indicated by hachured overprint

Kcs — Calcareous sandstone
Mostly fine- to medium-grained gray, highly calcareous, thin-bedded sandstone interbedded with non-calcareous siltstone

PERMIAN AND TRIASSIC(?)

TRPvs — Metavolcanic and metasedimentary rocks
Chiefly gray and green, fine- to medium-grained schistose rocks. Hachured overprint indicates rocks recrystallized to hornfels by contact metamorphism

Contact
Dashed where approximately located or inferred; queried where uncertain

Strike and dip of beds
Probably includes some overturned beds

Lineament
Poorly defined where dashed and queried

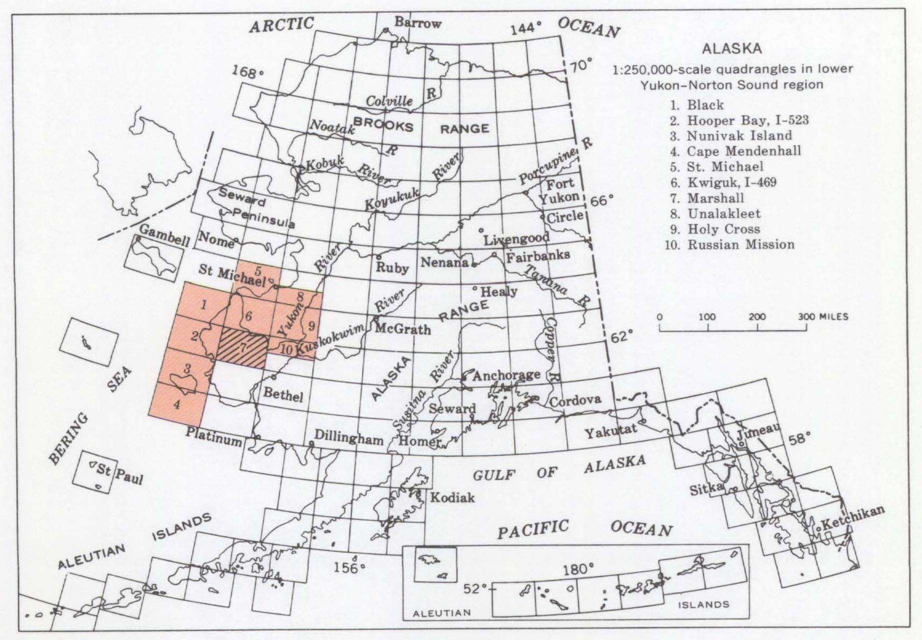
○M 1173
Fossil locality
Collection number mentioned in text

Inferred fault zone

Crater rims

× Young small spatter cones and craters

△ Highly modified older volcanic vents



INDEX MAP OF ALASKA
Location of Marshall quadrangle relative to the lower Yukon-Norton Sound region

Base by U.S. Geological Survey, 1954
100,000-foot grids based on Alaska coordinate system, zones 7 and 8

SCALE 1:250 000
5 0 5 10 15 20 25 MILES
5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 100 FEET
DOTTED LINES REPRESENT 50-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 1 FOOT
1971 MAGNETIC DECLINATION AT SOUTH EDGE OF SHEET VARIES FROM 17° TO 19° EAST

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.C.—1971—G70234

Geology by J. M. Hoare and W. H. Condon, 1960–63 and 1966; assisted by R. W. White 1960 and T. P. Miller in 1963

GEOLOGIC MAP OF THE MARSHALL QUADRANGLE, WESTERN ALASKA

By
J. M. Hoare and W. H. Condon
1971

For sale by the U.S. Geological Survey, price $1.00
Explanatory pamphlet accompanies map