UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY

PRELIMINARY MAP (IN 2 SHEETS) SHEET 1

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RECONNAISSANCE GEOLOGIC MAP OF THE LOWER KUSKOKWIM REGION, ALASKA

(SHEET 1)

By J. M. HOARE and W. L. COONRAD

SCALE 1:180,000

5 4 3 2 1 0 5 10 15 20 25

1954

Note: Map compiled from reconnaissance studies from 1946 to 1950. New paleontologic information and field work indicate that part of the rocks mapped as Triassic, Lower Cretaceous, and undifferentiated Triassic-Lower Cretaceous are of Upper Jurassic age and part of the rocks mapped as Upper Cretaceous are of Lower Cretaceous age. See accompanying generalized description of stratigraphic units.

EXPLANATION

BEDDED ROCKS

CENOZOIC

- RECENT AND PLEISTOCENE — Qal — Fine and coarse-grained alluvial deposits including glacial outwash.
- PLIOCENE OR PLEISTOCENE — Qg — Glacial gravels. Mainly ice deposited
- PLIOCENE OR PLEISTOCENE — Vesicular basalt, acidic tuffs and obsidian
- MIOCENE(?) — Teb — Andesitic and basaltic volcanics

MESOZOIC

- UPPER CRETACEOUS — UK — Kuskokwim group: interbedded shale, graywacke, siltstone, and conglomerate
- UPPER CRETACEOUS — UKv — Andesitic lava and interbedded sedimentary rocks
- LOWER CRETACEOUS — LK — Graywacke, conglomerate, impure limestone, crystal tuff, siliceous siltstone, volcanic rocks
- TRIASSIC — Undifferentiated Triassic-Lower Cretaceous rocks
- TRIASSIC — Argillite, chert, calcareous siltstone and graywacke, crystalline limestone; (Ɍv) volcanic rocks

PALEOZOIC

- PERMIAN — PⱤ — Undifferentiated Permian-Triassic rocks
- PERMIAN — P — Phyllitic and slaty rocks. Chert, argillite, and volcanic rocks
- PERMIAN — Pg — Greenstone, with a minor amount of altered sedimentary rocks
- PERMIAN — Pl — Gray and buff limestone with tuffaceous zones; including highly calcareous siltstones on Chikuminuk Lake
- DEVONIAN MISSISSIPPIAN(?) — Ml, M — Chert, quartzites, slate and argillite with thin bands of limestone, (Ml)
- DEVONIAN MISSISSIPPIAN(?) — Dl — Massive and thin-bedded gray limestone

PROTEROZOIC (?)

- um — Undifferentiated metamorphic rocks; gneiss, quartz-biotite schist, garnetiferous amphibolite, and crystalline limestone

INTRUSIVE ROCKS

TERTIARY

- Tis — Porphyritic rhyolite
- Tib — Mainly diabase and gabbro
- Tig — Granitic rocks probably of early Tertiary age, possibly of late Mesozoic age
- Ub — Serpentine from alteration of ultra basic rocks; probably of Tertiary age

CONTACT METAMORPHIC AUREOLE

- Biotite and Cordierite hornfels

STRUCTURE

- Contact
- Contact approximate
- Contact inferred
- Fault
- Fault approximate
- Fault inferred
- Anticlinal axis
- Synclinal axis
- Overturned anticline
- Overturned syncline
- Approximate and inferred location of fold axis

CULTURE

- Placer gold mine
- Placer prospect
- Village

APPROXIMATE MEAN DECLINATION 1950 (MAGNETIC NORTH, TRUE NORTH, 19°38')

Base compiled and modified from photoalidade manuscript sheets of U.S.G.S. Russian Mission, Bethel, Goodnews, and Taylor Mountains quadrangles, 1:250,000 series (topographic)

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This report is preliminary and has not been edited or reviewed for conformity with U. S. Geological Survey standards and nomenclature.