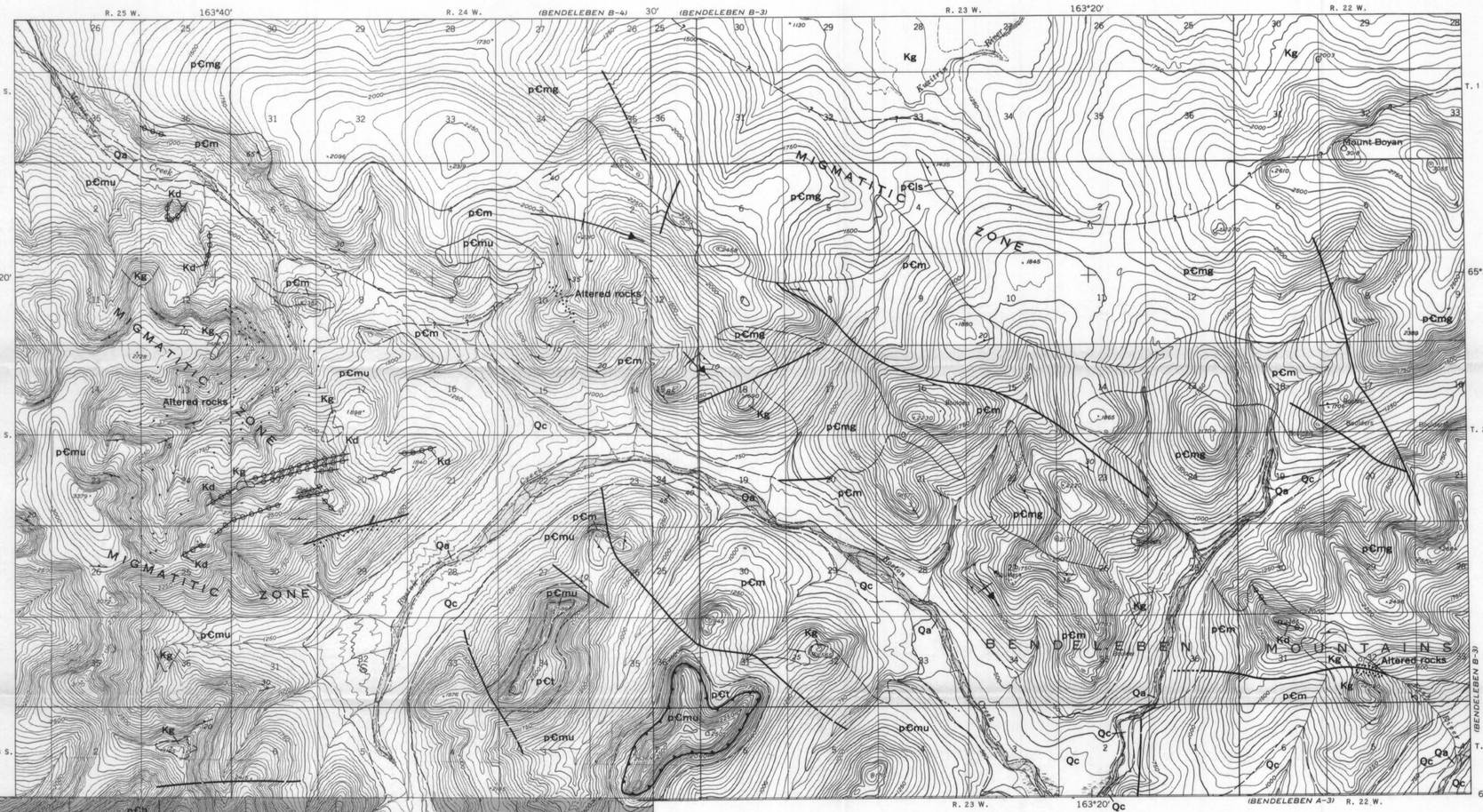

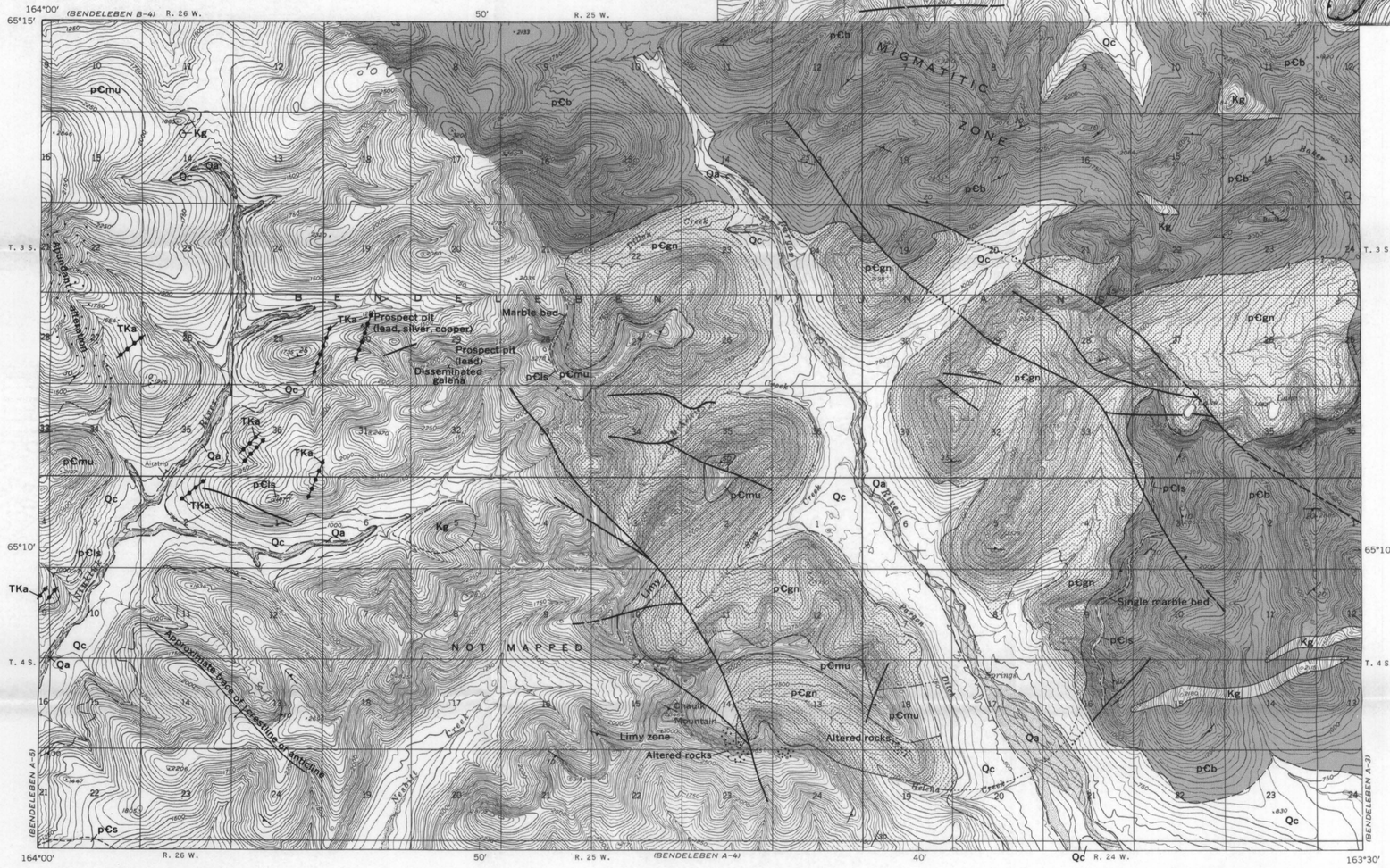

EXPLANATION

Holocene

Qc — Surficial cover
Principally tundra and brush

Qa — Alluvium
Includes terrace gravels

CRETACEOUS OR TERTIARY

TKa — Altered dikes
Rhyolitic to dacitic

CRETACEOUS

Kg — Granitic rock
Includes stocks, bosses, and batholiths ranging from monzonite to granite

Kd — Dikes
Granitic to monzonitic

PRECAMBRIAN

p€s — Graphitic phyllite and shale
Locally metamorphosed to hornfels or quartz-rich rock with graphite expelled

p€gn — Gneiss dome
Leucocratic gneisses surrounding a granitic gneiss core

p€t — Tectonically sheared marble

p€ls, p€b, p€mu — Metamorphic rocks
Include paragneiss, crystalline schist, and minor amounts of amphibolite and calc-silicate rocks
p€b, *principally biotite schist and graphitic biotite schist*
p€ls, *thin limestones, marble, and calcite-mica schists*

p€m — Marble and marble schist
Confined to a single continuous belt in the Bendeleben Mountains; cut by innumerable granitic dikes

p€mg — Paragneisses and granitic rocks
Migmatized; granitic rocks are related to younger batholith of Cretaceous age

Contact
Dashed where approximately located, gradational, or inferred; dotted where concealed; queried where doubtful

Fault
Dashed where approximately located; Dotted where concealed. Bar and ball on downthrown side

Thrust fault
Sawteeth on upper plate

35 — Inclined; Vertical; Overturned
Approximate strike and dip or direction of dip of foliation or schistosity

Anticline — **Syncline**
Folds
Showing approximate trace of crestline or troughline and plunge of axis

10 — Direction and plunge of dragfold axis

Altered rocks
Kaolinized and iron-stained; in marble includes local tactite (?)

Base from U.S. Geological Survey, 1950

Geology by C. L. Sainsbury, 1969

GEOLOGIC MAP OF PARTS OF THE BENDELEBEN A–4, B–3, AND B–4 QUADRANGLES, BENDELEBEN MOUNTAINS, SEWARD PENINSULA, ALASKA

SCALE 1:63 360

1 ½ 0 1 2 3 4 MILES

1 .5 0 1 2 3 4 KILOMETERS

CONTOUR INTERVAL 50 FEET
DASHED LINES REPRESENT 25-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

1972 MAGNETIC DECLINATION FOR THIS SHEET VARIES FROM 18°00' EASTERLY FOR THE CENTER OF THE WEST EDGE TO 18°30' EASTERLY FOR THE CENTER OF THE EAST EDGE. MEAN ANNUAL CHANGE IS 0°2' WESTERLY

489-407 O - 73 (Inside back cover) No. 1