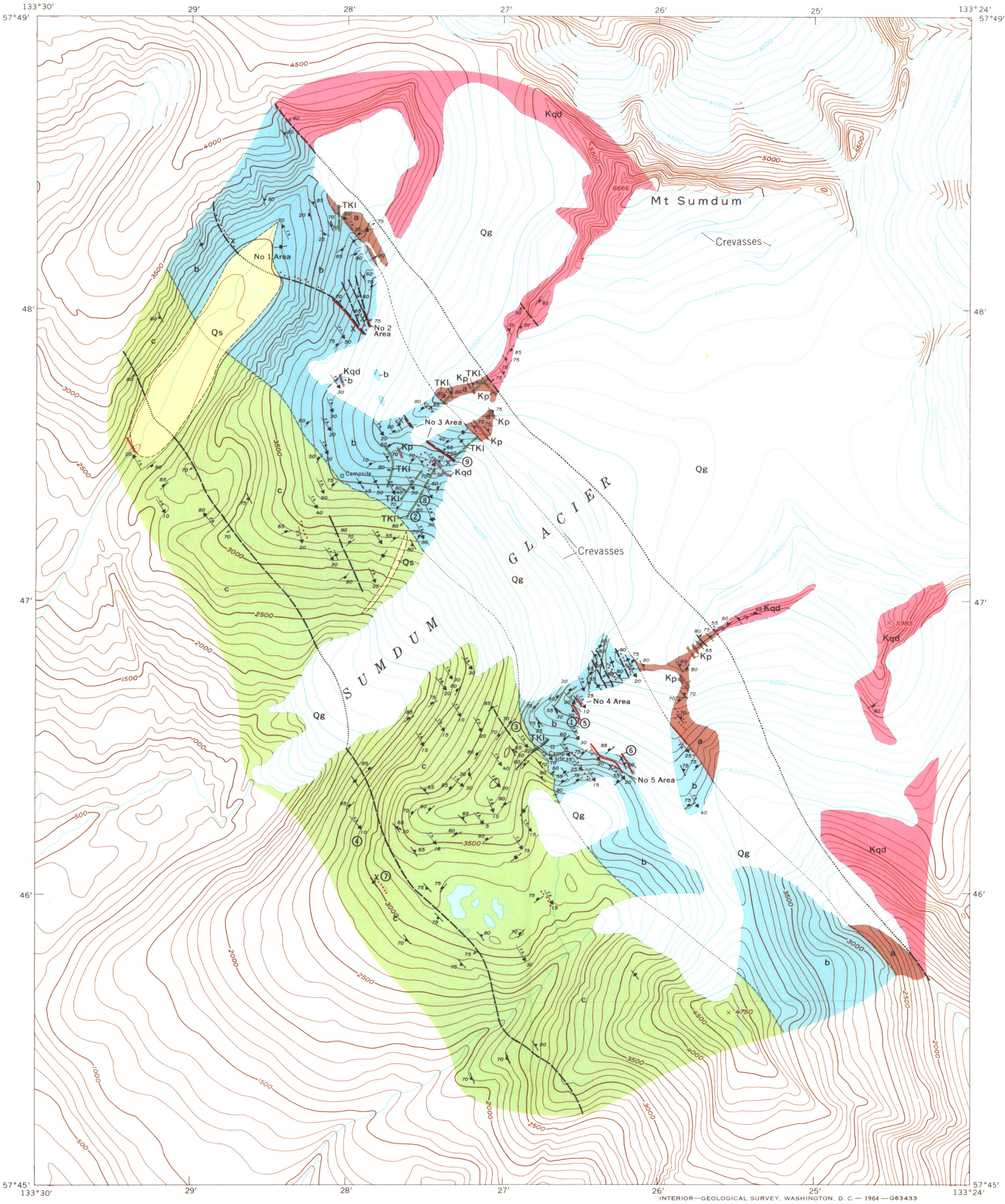
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BULLETIN 1108-E
PLATE 1




## EXPLANATION

**Surficial deposits**
Qs, *fluvio-glacial deposits, talus, and alluvium*
Qg, *glaciers and snowfields*

**Lamprophyre dike, showing dip**
*Dashed where approximately located*

**Pegmatite dike or sill**
*Dashed where approximately located*

**Quartz diorite**
*Includes part of Coast Range batholith as well as dikes or sills. Approximately located*

**Metamorphic rocks**
*Unit* a, *mainly calc-silicate hornfels*
*Unit* b, *mainly gneiss*
*Unit* c, *mainly schist*

QUATERNARY
CRETACEOUS OR TERTIARY
CRETACEOUS
PALEOZOIC AND (OR) MESOZOIC

**Gradational contact, showing dip**
*Dotted where concealed*

**Gradational vertical contact**
*Dotted where concealed*

**Fault**
*Showing dip and rake of slickensides. Dashed where approximately located, dotted where concealed*

**Vertical fault**
*Approximately located*

**Plunge of fold axis**

**Strike and dip of foliation**

**Strike of vertical foliation**
*Arrow indicates plunge of lineation*

**Strike and dip of foliation and rake of lineation**

**Strike and dip of joint**

**Strike of vertical joint**

**Deposits of sulfide minerals**
*Chiefly pyrite and pyrrhotite*

**Mainly secondary iron minerals, subordinate disseminated sulfide minerals**

**Surface cut or exploratory trench**

**Location of sample**
*Semiquantitative spectrographic analyses given in text*

APPROXIMATE MEAN DECLINATION, 1964

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.— 1964 — G63433

Base enlarged from U.S. Geological Survey quadrangle: Sumdum D–5, 1948

Geology by E. M. MacKevett, Jr. and M. C. Blake, Jr., 1960

# GEOLOGIC MAP OF THE SUMDUM COPPER-ZINC PROSPECT, SOUTHEASTERN ALASKA

SCALE 1:20 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 100 FEET
DATUM IS MEAN SEA LEVEL