

CORRELATION OF MAP UNITS

Q	QUATERNARY
QT	QUATERNARY OR TERTIARY
TKI	TERTIARY AND CRETACEOUS
bc	PRECAMBRIAN Y
gd	PRECAMBRIAN X
gg	PRECAMBRIAN X
bg	PRECAMBRIAN X
bm	PRECAMBRIAN X

DESCRIPTION OF MAP UNITS

Q SURFICIAL DEPOSITS (QUATERNARY)—Mainly glacial drift, talus, and alluvium

QT OLDER SURFICIAL DEPOSITS (QUATERNARY OR TERTIARY)—Bouldery diamicton on ridges; may be pre-Bull Lake glacial drift or upper Tertiary gravel

TKI INTRUSIVE ROCKS (TERTIARY AND CRETACEOUS)—Dominantly equigranular to porphyritic quartz monzonite; also includes syenite, monzonite, gneiss, and ultramafic rocks

bc DIKE OR SILL (TERTIARY AND CRETACEOUS)—Hypabyssal porphyries mostly of intermediate composition

***** SANDSTONE DIKES (PALEOZOIC?)—White, buff, gray or reddish-brown quartzitic sandstone. Symbol shows location of dike too small to be shown at scale of map. Present only in Anapaho Pass fault zone

gg SILVER PLUME GRANITE (PRECAMBRIAN Y)—Buff-weathering very light gray biotite quartz monzonite to granite. Tabular microcline crystals are characteristic

sb SILVER PLUME GRANITE AND BIOTITE GNEISS (PRECAMBRIAN Y AND X)—Areas of poor or inaccessible exposure where mixtures of rocks in solution deposits or talus suggest the presence of many bodies of Silver Plume Granite in biotite gneiss

bh BIOTITE QUARTZ DIORITE AND BIOTITE-HORNBLende QUARTZ DIORITE AND HORNBLende (PRECAMBRIAN Y AND X)

bc BOULDER CREEK GRANODIORITE (PRECAMBRIAN X)—Biotite granodiorite and quartz monzonite, mostly porphyritic; strongly gneissic or schistose locally

p PEGMATITE (PRECAMBRIAN X)—Believed to be related to Boulder Creek Granodiorite

gd GNEISSIC GRANODIORITE (PRECAMBRIAN X)—Fine- to medium-grained gray granodiorite and quartz diorite. Locally contains garnet, hornblende, and (or) pyroxenes. Rock is not layered but is variably gneissic; it commonly contains augen (phenocrysts?) about 5 mm long

gg GRANITIC GNEISS (PRECAMBRIAN X)—Locally sillimanitic

bg BIOTITE GNEISS (PRECAMBRIAN X)—Most contains sillimanite, and some contains garnet and (or) cordierite

bm BIOTITE GNEISS AND GRANITIC GNEISS (PRECAMBRIAN X)

CONTACT—Approximately located

FAULT—Dashed where inferred; dotted where concealed; queried where doubtful. Broad zones of crushed rock are cross hatched

SHEARED ROCK—Along faults

FOLDS—Showing approximate trace of axial surface

Anticline

Syncline

STRIKE AND DIP OF FOLIATION

Inclined

Vertical

Horizontal

BEARING AND PLUNGE OF LINEATION—Mostly minor fold axes. Foliation and lineation symbols may be combined

DIKE OR SILL—Dashed where inferred

VEIN—Dashed where inferred

SILICIFIED AND PYRITIZED ROCK

MINES AND PROSPECTS

Shaft

Prospect pit

Adit (open)

Adit (closed)

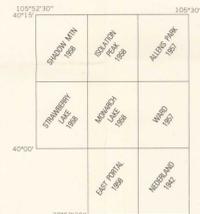
MAGNETIC CONTOURS—Showing total intensity of earth's magnetic field, in gammas, relative to arbitrary datum; hachured to indicate closed areas of lower magnetic intensity. Contour interval 100 gammas; supplementary 20-gamma contours shown locally

LOCATION OF MEASURED MAXIMUM OR MINIMUM INTENSITY WITHIN CLOSED HIGH OR CLOSED LOW—In gammas

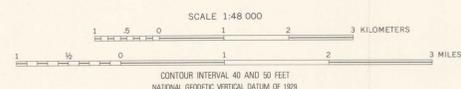
FLIGHTPATH—Showing location and spacing of magnetic data

APPROXIMATE BOUNDARY OF THE INDIAN PEAKS STUDY AREA

Base from U.S. Geological Survey
Allens Park, 1937, East Portal, 1958, Isolation Peak, 1958,
Moranoch Lake, 1958, Nederland, 1942, Shadow Mtn., 1958,
Strawberry Lake, 1958, Ward, 1957



INDEX MAP SHOWING U.S. GEOLOGICAL SURVEY
1:24,000 QUADRANGLES USED IN THIS STUDY



Geology by R. C. Pearson, 1972-73, and J. C. Rankin, 1973,
assisted by R. S. Kuhlman and E. M. Ricketts, 1973. Geology
in Nederland quadrangle modified from Gable (1959), and
in West quadrangle modified from D. J. Gable and R. F.
Musille (1978).
Aeromagnetic survey flown at 14,000 feet (4,267 m) barometric
elevation, 1967; flight-line spacing one mile (1.6 km).

GEOLOGIC AND AEROMAGNETIC MAP OF THE INDIAN PEAKS STUDY AREA, BOULDER AND GRAND COUNTIES, COLORADO