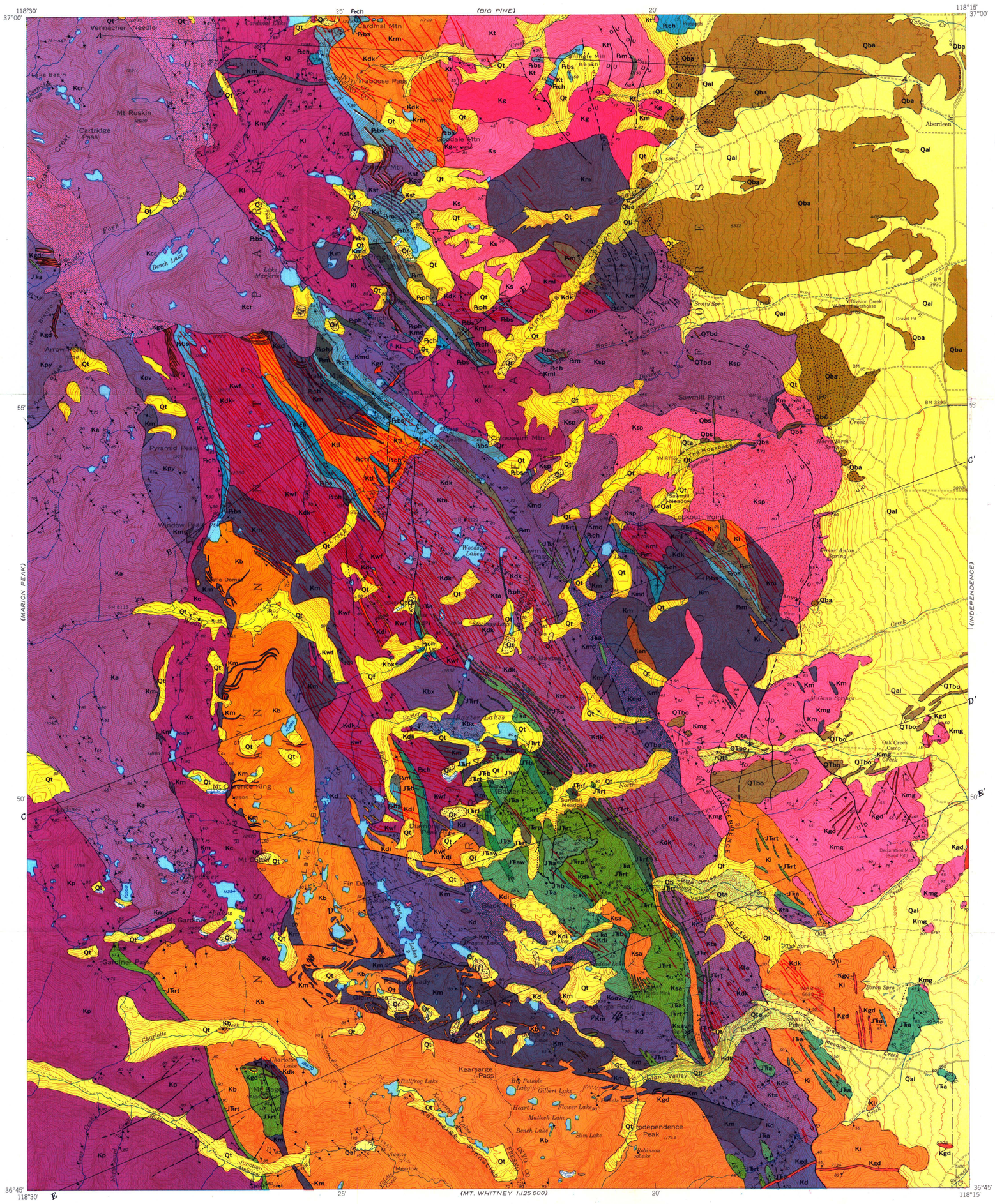


EXPLANATION

QUATERNARY

Recent

Alluvium
Qal, *valley fill and alluvial-fan material.*
Qr, *rock glaciers.*
Qt, *undifferentiated talus, slope wash, and locally some glacial deposits*

GLACIAL DEPOSITS

Pleistocene

Tioga till

Tahoe till

BASALT

Olivine basalt west of Aberdeen
Cinders shown by dotted pattern

Olivine basalt of Sawmill Canyon

TERTIARY OR QUATERNARY

Olivine basalt of Oak Creek
Agglomerate shown by dotted pattern. Relation to earlier moraine questionable

Olivine basalt dikes of Division Creek

PLUTONIC ROCKS

Granitic dikes
Only large or conspicuous ones mapped

CALCIC GRANODIORITE

Baxter pluton
Dark fine-grained granodiorite and quartz diorite. Dotted pattern where mixed with lighter colored granitic rocks

Striped pluton
Dark fine-grained granodiorite. Dotted pattern where mixed with lighter colored granitic rocks

Dragon pluton
Quartz-poor granodiorite and quartz monzonite. Dotted pattern where mixed with darker colored granitic rocks

Pyramid pluton
Dark granodiorite. East and west masses

McDoogle pluton
Dark granodiorite. Dotted pattern where darker colored

SILICIC GRANODIORITE

Cartridge Pass pluton
Dark granodiorite on margin and slightly porphyritic quartz monzonite in center. Darkest facies shown by dotted pattern

Lamarck granodiorite
Lamarck mass and Colosseum mass. Slightly porphyritic granodiorite and quartz monzonite

Cotter pluton
Dark fine-grained granodiorite and quartz monzonite

Paradise pluton
Porphyritic granodiorite and quartz monzonite

Arrow pluton
Granodiorite and quartz monzonite

Spook pluton
Granodiorite and quartz monzonite. Inner lighter colored and commonly porphyritic facies is shown by dotted pattern

Independence dike swarm
Predominantly fine-grained diorite and granodiorite porphyry. Dikes shown diagrammatically. Each line represents approximately one 5-foot dike or equivalent

Mule Lake pluton
North and south masses. Porphyritic granodiorite and quartz monzonite

Tinemaha granodiorite
Woods Lake mass. Slightly porphyritic granodiorite and quartz monzonite

White Fork pluton
Sheared and gneissose granodiorite and quartz monzonite

Anorthosite

Mafic plutonic rock
Mafic granodiorite, quartz diorite, diorite, gabbro, and peridotite. Commonly intimately mixed with granitic material and metamorphic rocks and cut by granitic dikes. Includes dikes of remobilized mafic plutonic rock

QUARTZ MONZONITE

Siberian pluton
Uniform quartz monzonite

Goodale pluton
Quartz-poor quartz monzonite

McGann pluton
Quartz-poor quartz monzonite

ALASKITE

Sardine pluton—main mass and related dikes
Ksa, *uniform alaskitic quartz monzonite; related mineralized veins are shown by beaded line,* Ksav

Bullfrog pluton
Alaskitic quartz monzonite. Fine-grained facies present west of Mount Bago metavolcanic septum. Quartz-poor in southeastern part

Taboose pluton
Quartz monzonite with zones of mixed fine- and coarse-grained rock

Twin Lakes pluton
Alaskitic quartz monzonite. Dotted where mixed with darker colored granitic rocks

Diamond pluton
Alaskitic quartz monzonite

Red Mountain Creek pluton
Alaskitic quartz monzonite

Independence pluton
Alaskitic quartz monzonite

(Relative ages are approximate only)

CRETACEOUS

METAMORPHIC ROCKS

Metarhyolite
J̄Ŧrt, *metarhyolite tuffs with some other metavolcanic rocks interbedded.*
J̄Ŧrf, *metarhyolite lava flows or silicified tuffs.*
J̄Ŧrp, *piedmontite-bearing metarhyolite tuffs*

Meta-andesite and metadacite
J̄Ŧra, *undifferentiated tuffs, breccias, and flows, with minor occurrences of interbedded basalt.*
J̄Ŧraw, *water-laid tuffs*

Metabasalt and meta-andesite
Intermediate to mafic, dark-colored lava flows, and some mafic pyroclastic rocks

TRIASSIC AND JURASSIC

Biotite schist

Marble

Calc-hornfels

Pelitic hornfels and quartzite

PALEOZOIC

Contact, showing dip
Long dashes where approximately located; short dashes where gradational; dotted where concealed

Fault, showing dip
Dashed where approximately located; dotted where concealed.
U, *upthrown side;* D, *downthrown side*

Fault, showing relative movement

Thrust fault
Sawteeth on upper plate

Syncline, showing trace of axial plane

Strike and dip of beds

Strike of vertical beds

Strike and dip of foliation

Strike of vertical foliation

Bearing and plunge of lineation
Long axis of oriented, elongated inclusions in granitic rocks. Long axis of mineral streaks, prismatic minerals, and stretched pebbles in metamorphic rocks

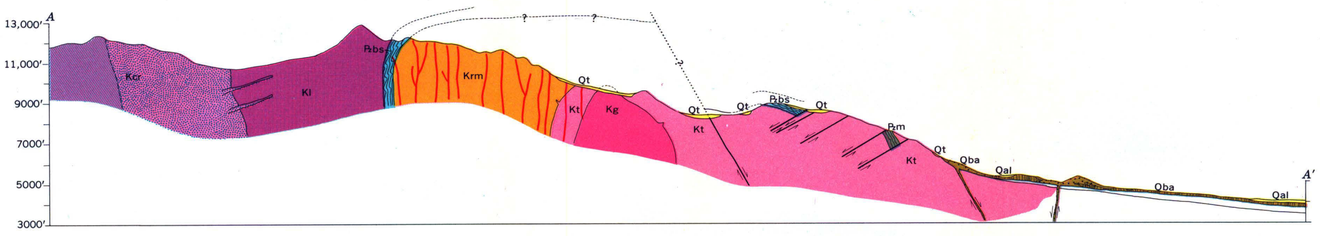
Strike and dip of foliation and bearing and plunge of lineation

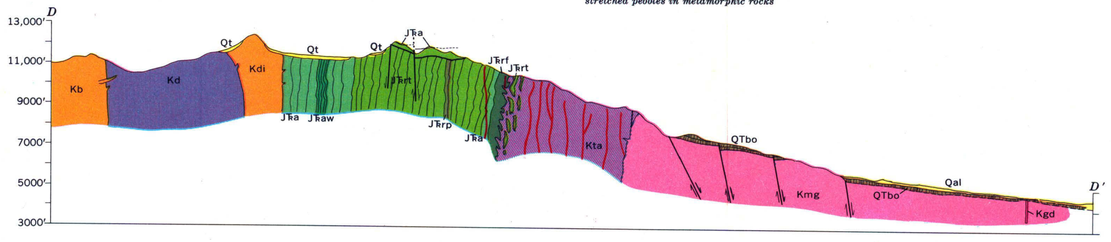
Bearing of horizontal lineation

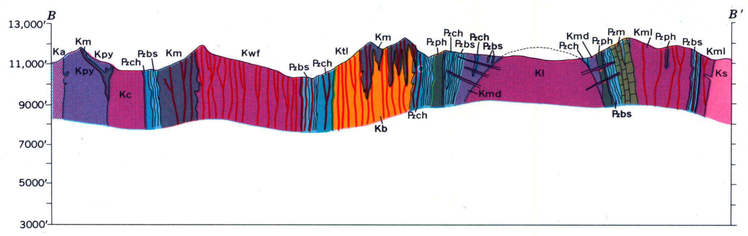
Strike of foliation or bearing of lineation
Dip or plunge unknown

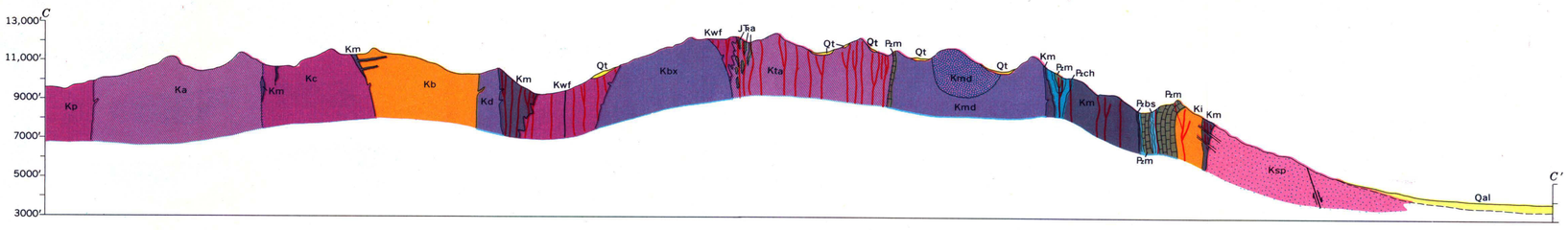
Horizontal lineation in horizontal foliation

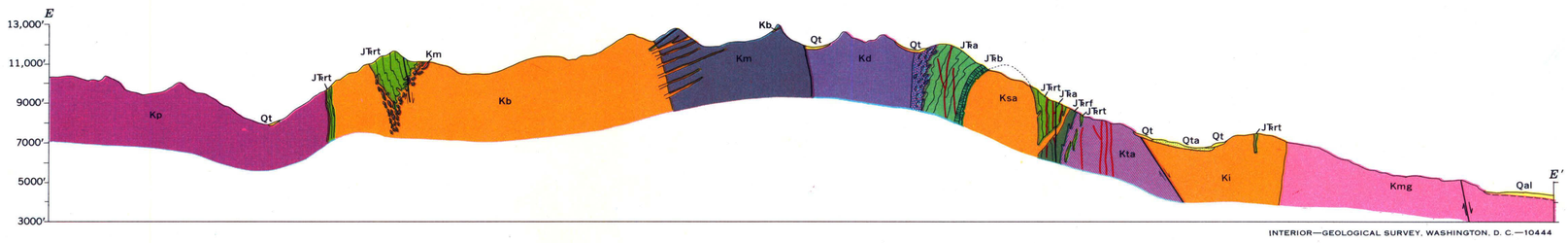
Bearing and plunge of lineation in vertical foliation







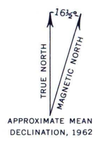




INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—10444

Base by U.S. Geological Survey

Geology by J. G. Moore, C. A. Hopson, and J. G. Stone, 1953, 1954, 1956, and 1957



GEOLOGIC MAP AND SECTIONS OF THE MOUNT PINCHOT QUADRANGLE, CALIFORNIA

SCALE 1:62 500

1 ½ 0 1 2 3 MILES

CONTOUR INTERVAL 80 FEET
DATUM IS MEAN SEA LEVEL