

EXPLANATION

Sedimentary and volcanic deposits
Shown only in areas of extensive outcrop, off
Eastern Sierra Nevada, Huntington Lake region,
and White and Inyo Mountains

INTRUSIVE ROCKS

Granodiorite of Cartridge Pass
Granodiorite of Coyote Flat
Johnson granite porphyry
Huffman quartz monzonite of Curtis, Eversden, and Lipson (1958)
Cathedral Peak granite
Half Dome quartz monzonite and similar quartz monzonite west of Mono Lake and south of the Ritter Range pendant
Sentinel granodiorite and similar granodiorite west of Mono Lake
Taft granite
El Capitan granite
Includes Lansing Tross quartz monzonite
Grandiorite of the gateway
Biotite granite of Arch Rock
Diabase and gabbro
Age relations with other intrusive rocks variable
Older granitoid rocks
Chiefly granodiorite
Ultramafic rocks
Chiefly serpentinite
Metavolcanic rocks
Query diorite (inclusive age assignment)
Metasedimentary rocks
Query diorite (inclusive age assignment)
Metasedimentary rocks
Query diorite (inclusive age assignment)
Metasedimentary rocks
Query diorite (inclusive age assignment)
Sedimentary rocks
Largely metamorphosed in Sierra Nevada
Undifferentiated metasedimentary rocks
Sedimentary rocks
Largely metamorphosed in Sierra Nevada. Older sedimentary areas in White Mountains may be upper Proterozoic

Miscellaneous rocks
uncertain age
Bridalveil granite of Yosemite and miscellaneous felsic intrusive rocks southeast of Huntington Lake, which are younger than the Mount Givens granodiorite and hornblende-biotite granodiorite, "Dinky Creek" type
Assigned as well as external contact shown
Unassigned granitic rocks
Cathedral Peak granite are shown north of Yosemite Valley, near Curry Gold, and in Mount Piute quadrangle. Granitic rocks east of Owens Valley are undifferentiated

INTRUSIVE ROCKS (continued)

Finer grained quartz monzonite
Rocks similar to the Cathedral Peak granite
Chiefly felsic quartz monzonite and diorite. Includes quartz monzonite of Mono Basin and south of Grosvenor Peak of Shoshone and Mono (1911). Apatite and some of quartz monzonite are serpyritiferous
Tungsten Hills quartz monzonite
Granodiorite of Deep Canyon
Mount Givens granodiorite
Includes biotite granodiorite "Dinky Creek" type of Krasakopf (1952)
Lamarck granodiorite
Round Valley Peak granodiorite
Granodiorite of McMurtry Meadows
Wheeler Crest quartz monzonite
Tiemahs granodiorite
Inconceivable granodiorite
Mafic dikes
Pre-Lamarck granodiorite in Mount Piute quadrangle. Includes age in unknown, but same age younger than Tungsten Hills quartz monzonite
Felsic dikes
Older sheared granitic rocks

SEDIMENTARY AND VOLCANIC ROCKS

Metavolcanic rocks
Query diorite (inclusive age assignment)
Metasedimentary rocks
Query diorite (inclusive age assignment)
Metasedimentary rocks
Query diorite (inclusive age assignment)
Metasedimentary rocks
Query diorite (inclusive age assignment)
Sedimentary rocks
Largely metamorphosed in Sierra Nevada
Undifferentiated metasedimentary rocks
Sedimentary rocks
Largely metamorphosed in Sierra Nevada. Older sedimentary areas in White Mountains may be upper Proterozoic

UNDIFFERENTIATED METASEDIMENTARY ROCKS

Undifferentiated metasedimentary rocks and associated metasedimentary rocks of pre-Cretaceous age
Undifferentiated metavolcanic and associated metavolcanic rocks of pre-Cretaceous age

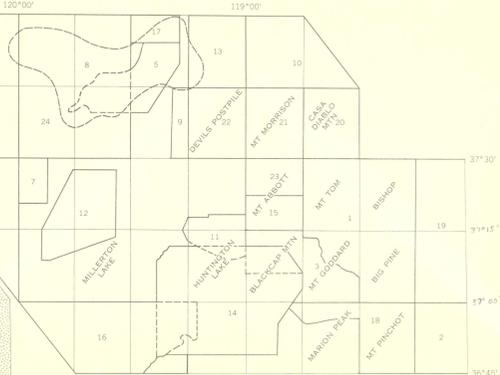
CONTACTS

Contact
Internal contacts within map units
Used to show structural trends in pre-Cretaceous rocks
Fault
Dashed where approximately located
Thrust or reverse fault
Shown on upper plate
Anticline
Showing trace of axial plane
Syncline
Showing trace of axial plane
Overturned syncline
Showing trace of axial plane
Strike and dip of beds
Strike and dip of overturned beds
Strike of vertical beds
Granitic rocks
Metamorphic rocks
Strike and dip of foliation
Granitic rocks
Metamorphic rocks
Strike of vertical foliation
Bearing and plunge of lineation
Strike and dip of foliation and plunge of lineation

AGE DETERMINATION

Age of rock in millions of years
Determined by the lead-uranyl method (Kearns and Schmidt, 1955)

Age of rock in millions of years
Determined by the potassium-argon method (Eaton and others, 1957)



GEOLOGIC MAP AND SECTIONS OF THE CENTRAL SIERRA NEVADA, CALIFORNIA

