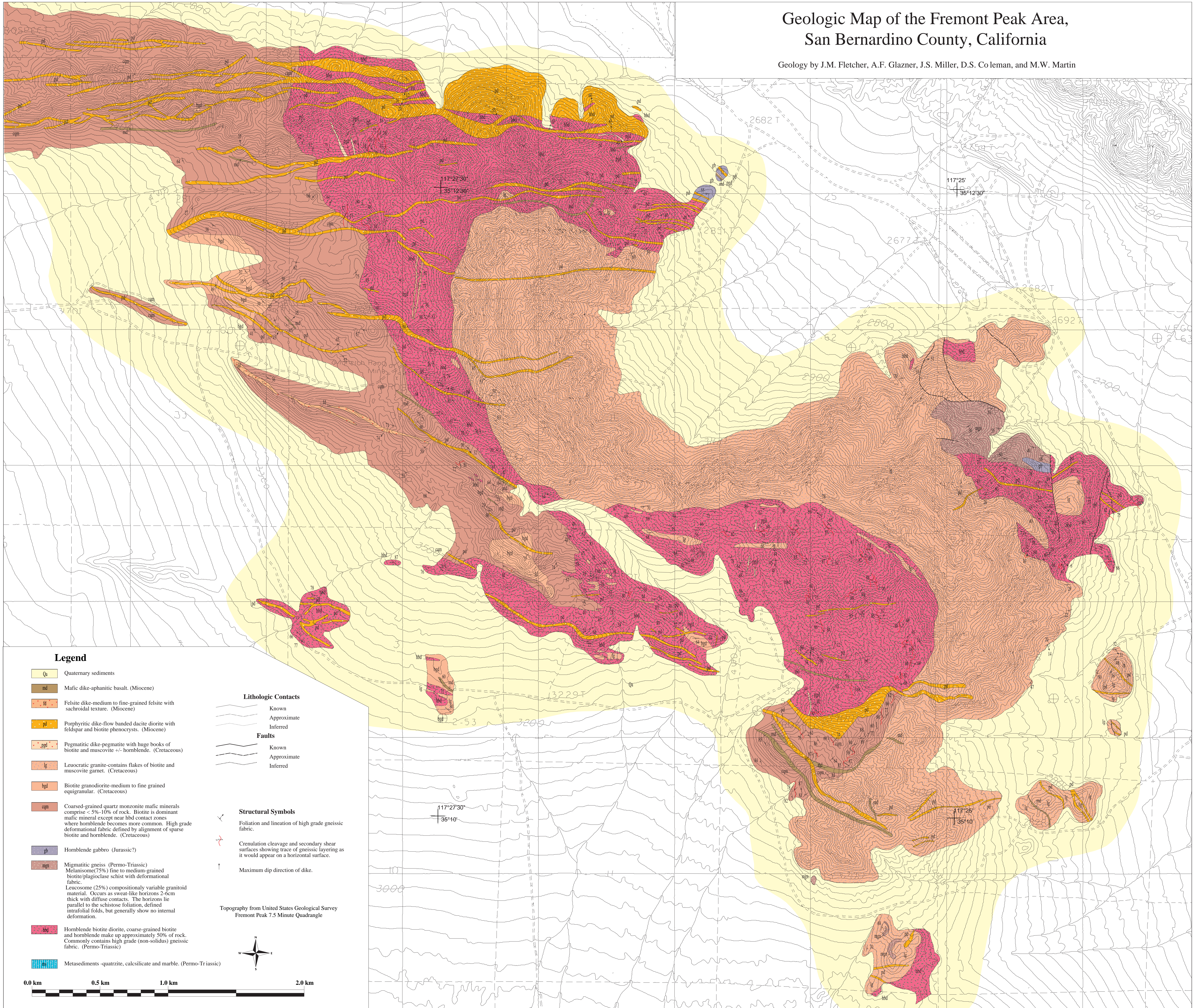


Geologic Map of the Fremont Peak Area, San Bernardino County, California

Geology by J.M. Fletcher, A.F. Glazner, J.S. Miller, D.S. Coleman, and M.W. Martin



Legend

- Quaternary sediments
- Mafic dike-aphanitic basalt. (Miocene)
- Felsite dike-medium to fine-grained felsite with saccharoidal texture. (Miocene)
- Porphyritic dike-flow banded dacite diorite with feldspar and biotite phenocrysts. (Miocene)
- Pegmatitic dike-pegmatite with huge books of biotite and muscovite +/- hornblende. (Cretaceous)
- Leucocratic granite-contains flakes of biotite and muscovite garnet. (Cretaceous)
- Biotite granodiorite-medium to fine grained equigranular. (Cretaceous)
- Coarsed-grained quartz monzonite mafic minerals comprise < 5%-10% of rock. Biotite is dominant mafic mineral except near hbd contact zones where hornblende becomes more common. High grade deformational fabric defined by alignment of sparse biotite and hornblende. (Cretaceous)
- Hornblende gabbro (Jurassic?)
- Migmatitic gneiss (Permo-Triassic)
Melanosome(75%) fine to medium-grained biotite/plagioclase schist with deformational fabric.
Leucosome (25%) compositionally variable granitoid material. Occurs as sweat-like horizons 2-cm thick with diffuse contacts. The horizons lie parallel to the schistose foliation, defined intrafolial folds, but generally show no internal deformation.
- Hornblende biotite diorite, coarse-grained biotite and hornblende make up approximately 50% of rock. Commonly contains high grade (non-solidus) gneissic fabric. (Permo-Triassic)
- Metasediments -quartzite, calcisclate and marble. (Permo-Triassic)

Lithologic Contacts

- Known
- Approximate
- Inferred

Faults

- Known
- Approximate
- Inferred

Structural Symbols

- Foliation and lineation of high grade gneissic fabric.
- Crenulation cleavage and secondary shear surfaces showing trace of gneissic layering as it would appear on a horizontal surface.
- Maximum dip direction of dike.

Topography from United States Geological Survey
Fremont Peak 7.5 Minute Quadrangle

