Geologic Map of Iron Mountain, Central Mojave Desert, CA

Geology by S. S. Boettcher

Explanation

Northern Area

- **Qal** — Quaternary alluvium, undifferentiated
- **apl** — Aplite dike, light gray to pale green weathering, fine to medium-grained, biotite phenocrysts, undeformed
- **mgg** — Muscovite garnet granite, white to light tan, spheroidal weathering, coarse-grained to pegmatitic, CI=0-10, occurs mainly as northwest trending dikes, undeformed, cross-cuts mylonitic and gneissic fabrics
- **bg** — Biotite granite, white to light tan, spheroidal weathering, coarse-grained, CI=10-15, garnet and muscovite locally present, contains mylonitic shear zones
- **hd** — Hornblende diorite, very dark brown to black weathering, CI=30-90, contains mylonitic shear zones
- **bt** — Biotite tonalite, dark gray, spheroidal weathering, CI=15-25, contains gneissic fabric with local mylonitic overprint
- **qfg** — Quartz feldspar orthogneiss, distinctly banded, injected into quartzite layers, isoclinal folds, local mylonitic overprint
- **csg** — Calc-silicate gneiss, dark brown to black weathering, fine-grained, often highly contorted, occurs in lenses
- **mq** — Micaceous quartzite, thinly layered, greater than 80% quartz, local occurrences of sillimanite
- **mbs** — Muscovite biotite schist, light tan to dark brown weathering, coarse-grained, local occurrences of garnet and sillimanite
- **q** — Quartzite, massive, greater than 90% quartz, occurs in thin lenses
- **m** — Marble, light tan weathering, coarse-grained, dolomitic, common occurrences of diopside, isoclinal folds

Central Area

- **Qal** — Quaternary alluvium, undifferentiated
- **fd** — Felsite dike, gray weathering, very fine-grained, biotite phenocrysts
- **gdp** — Granodiorite porphyry, dark gray weathering, 3-6cm K-feldspar phenocrysts, medium grained matrix, CI=30-35, local platy foliation
- **mgg** — Muscovite garnet granite, white to light tan, spheroidal weathering, CI=0-5, undeformed
- **bg** — Biotite granite dike, light tan, spheroidal weathering, CI=10-15, rare occurences of muscovite and garnet, contains mylonitic shear zones
- **hd** — Hornblende diorite, very dark brown to black, blocky weathering, CI=30-90, commonly 65, contains mylonitic shear zones

Southern Area

- **Qal** — Quaternary alluvium, undifferentiated
- **fd** — Felsite dike, gray weathering, very fine-grained, biotite phenocrysts
- **gr** — Granite, pink stained in extreme south, friable, coarse-grained, CI=10-20, cross-cuts fabric in qbmv unit
- **qtz** — Quartzite, dark brown weathering, thick-bedded to massive, occurs commonly in lenses within mss unit
- **mss** — Muscovite sericite schist, light tan, gray, and brown colored schists, fine to medium-grained, local occurrences of rounded quartz pebbles, highly foliated
- **afv** — Aphanitic felsic volcanic, light tan to brown weathering, quartz phenocrysts mylonitic in most intense zones of deformation
- **qbmv** — Quartz biotite metavolcanic, dark brown weathering, porphyritic, locally da brown, fine-grained schist, highly foliated, mylonitic in the most intense zones deformation, fabric weakens to the southeast

Lithologic Contacts

- Known
- Approximate
- Inferred

Faults

- Known
- Approximate
- Inferred

Structural Symbols

- Strike and dip of foliation
- Trend and plunge of lineation in the plane of foliation
- Trend and plunge of striae on planar surface
- Subvertical mylonitic shear zone

Topography from United States Geological Survey
Hinkley, Hodge, Twelve Gauge Lake, and Wild Crossing 7.5 Minute Quadrangles

0.0km 0.5km 1.0km 1.5km 2.0km