**DESCRIPTION OF MAP UNITS**

**CRETACEOUS**

- **Diorite (Cretaceous)**
  - Holocene
  - Tabular masses as much as 2 km long. Near-white, medium to coarse grained. Consists mainly of plagioclase and quartz. Has been affected by retrograde metamorphism, which affects not only charnockite, but surrounding granulitic gneiss.

- **Kimbark and Ames Canyons**
  - Tonalite of San Sevaine Lookout (Cretaceous)
    - Possibly ranging to granodiorite and quartz diorite.
    - Foliated, gray, medium- to coarse-grained; generally equigranular, with some degree into the tonalite; some rock contains scattered garnets having kelyphytic rims.
    - Along southeast side includes:
      - Mylonitized tonalitic rocks.
      - Homogeneous, gray, porphyroblastic mylonite; zone is 200 to 400 m in width.
      - Mylonite is commonly distinguished by terrace level and subhorizontal foliation, and by a pronounced subhorizontal lineation that plunges shallowly east and west.

- **Granulitic gneiss, mylonite, and cataclasite (Proterozoic?)**
  - Inclined, vertical, overturned

- **REFERENCES CITED**
  - Rogers, T.H., compiler, 1965, San Bernardino Sheet of Geologic map of California: California Division of Mines and Geology, Sheet 18D.
  - —Includes:
    - Low terraces of gravelly alluvium
    - White, fine-grained, porphyritic dacite. Contains medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.
    - Dacitic rocks (Oligocene)
    - White, fine-grained, porphyritic dacite. Contains medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

- **TERTIARY**
  - **Dacitic rocks (Oligocene)**
    - Medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

- **SYENOGRAINITE**
  - Hypidiomorphic-granular, white-weathering biotite granodiorite. Highly porphyritic, medium- to coarse-grained, with phenocrysts of plagioclase and quartz.

- **MONZOGRAINITE**
  - Medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

- **ALKALI-FELDSPAR GRANITE**
  - Medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

- **QUARTZ**
  - Medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

- **Dacitic rocks (Pleistocene)**
  - Medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

- **Dacitic rocks (Quaternary)**
  - Medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

- **Dacitic rocks (Pleistocene to Recent)**
  - Medium-grained, sub-feldspar. Weathers off-white. Occurs mainly as large, northeast striking dikes.

**REFERENCES CITED**

  - Includes:
    - Young alluvial fan deposits, Unit 3 (Holocene)
    - Young surficial units have extremely high coarse:fine clast ratios.

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