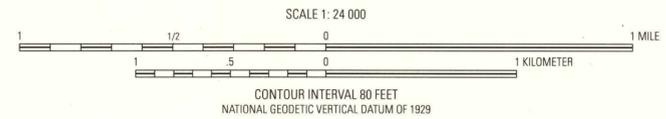
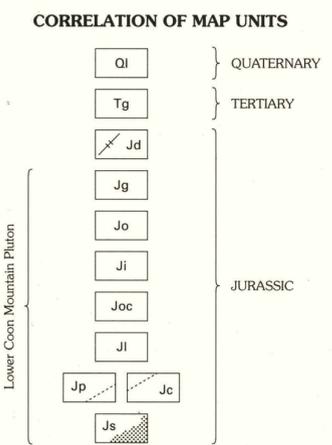


Base from U.S. Geological Survey, Gasquet, 1981; Cant Hook Mtn., 1982; Lambert Conformal Conic Projection

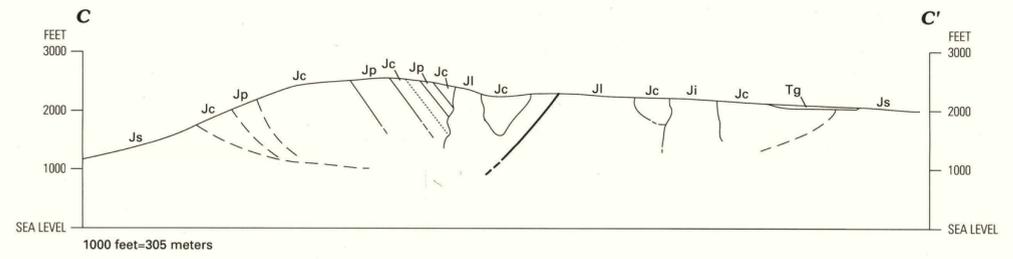
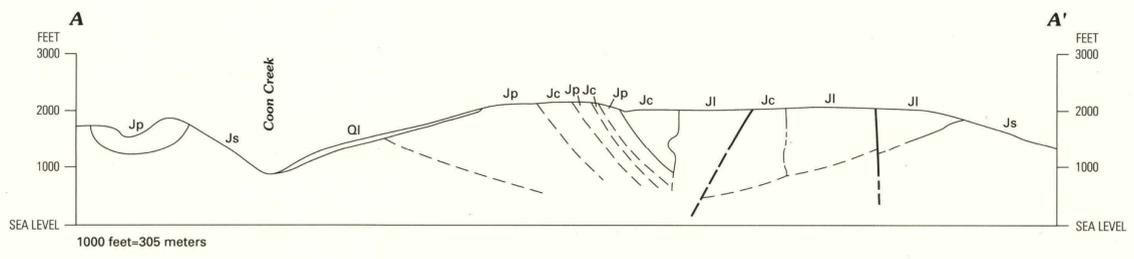
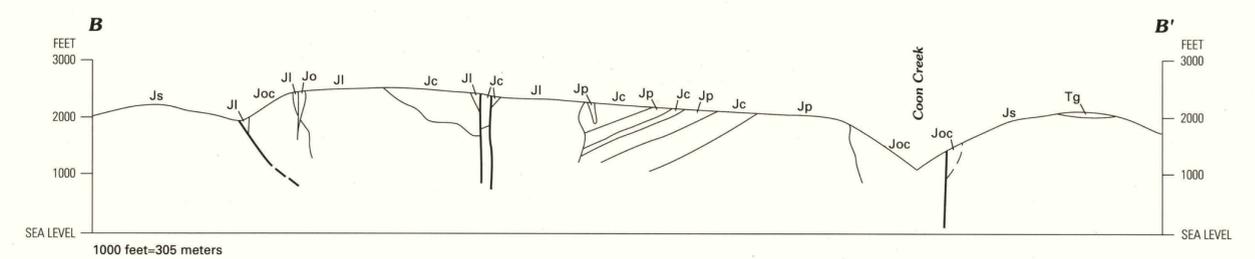


Geology mapped by N.J. Page and Floyd Gray, 1981-1983



- DESCRIPTION OF MAP UNITS**
- Ql** **Landslide deposit (Quaternary)**—Unconsolidated, poorly sorted rock and soil; occurs in southern part of map area
  - Tg** **Gravel and sand deposit (Tertiary)**—Crudely stratified, unconsolidated gravel and sand
  - Jd** **Dikes of tonalitic and porphyritic dacitic dikes (Jurassic)**—White to light-gray plagioclase-, hornblende-, and quartz-bearing siliceous dikes crosscutting most other units. Dikes may show dip
  - Jg** **Gabbro (Jurassic)**—Undifferentiated, varying textured, hornblende-bearing gabbroic intrusive rocks. Complex crosscutting relations present at margin of contact; contains minor hornfels
  - Jo** **Olivine cumulate and dunite (Jurassic)**—Buff-brown through dark-brown to black, medium- to coarse-grained, partially serpentinized olivine cumulate. Pyroxene occurs as coarse poikilitic crystals and as intercumulus anhedral patches between olivine crystals. Occurs as small intrusive bodies adjacent to unit Jc
  - Ji** **Intrusive feldspathic pyroxenite (Jurassic)**—Light-gray to gray, medium-grained equigranular rocks; composed of bytownite plagioclase, euhedral clinopyroxene, and lesser amounts of olivine, accessory magnetite, and rare late-stage hornblende

- Joc** **Olivine-clinopyroxene cumulate (Jurassic)**—Light- to dark-brown to black, fine- to coarse-grained, irregular-textured, olivine-rich rocks; consists of cumulus olivine and lesser amounts of clinopyroxene, present either as euhedral coarse crystals or in large clusters. Olivine typically shows interconnecting texture. Locally forms intrusion breccia at contact with unit JI
  - Jl** **Layered olivine-clinopyroxene cumulate (Jurassic)**—Dark-green to greenish-gray, coarse-grained rocks; consists of subhedral to euhedral pyroxene (as large as 1.5 cm). Anhedral olivine commonly displays interconnecting network texture; 2 volume percent opaques present and trace amounts of brown interstitial hornblende. Unit displays strong foliation and mineral layering; contains large pendant composed of units Jc and Jp
  - Jp** **Plagioclase-rich clinopyroxene olivine cumulate (Jurassic)**—Dark-greenish-gray, brown to buff to light-tan, medium-grained, equigranular, plagioclase-rich pyroxenite cumulate; local troctolitic lenses are present. Plagioclase may range in texture from interstitial anhedral grains forming approximately 7 volume percent of rock to euhedral grains constituting approximately 90 percent of rock. Composed of subhedral to euhedral augite, plagioclase, interstitial olivine, and greater than accessory magnetite; thin, irregular, magnetite-rich layers may be present (dotted lines). Olivine is primary mafic mineral in troctolitic varieties
  - Jc** **Clinopyroxene-olivine cumulate (Jurassic)**—Medium- to coarse-grained, greenish-brown to greenish-black, pyroxene-rich ultramafic rocks, characterized by cumulate textures; consists of euhedral to subhedral augite crystals, 2 to 7 mm in diameter, and lesser amounts of anhedral olivine, 4 to 5 mm in diameter, and interstitial magnetite. Locally, magnetite may occur in cumulate layers as much as 2.5 cm thick (dotted lines); these magnetite-rich horizons consist of magnetite (20-90 volume percent) and euhedral and clinopyroxene crystals and rare olivine. Unit is interlayered with unit Jp
  - Js** **Shale, minor volcanic rocks, and hornfelsed equivalent rocks (Jurassic)**—Interlayered shale and sandstone; locally occurs as light to greenish-gray phyllitic schist displaying distinct crenulation cleavage. Minor aphanitic metavolcanic flows and associated tuffaceous rocks (stippled) crop out adjacent to pluton
- Legend for symbols:**
- ? - ?** **Contact**—Approximately located; dashed where inferred; queried where projected; dotted where concealed; may show dip
  - - -** **Fault**—Approximately located; dashed where inferred; dotted where concealed; may show dip
  - 70** **Strike and dip of beds**
  - Inclined**
  - Vertical**
  - 60** **Strike and dip of layering in igneous rocks**
  - Inclined**
  - Vertical**



# GEOLOGIC MAP AND CROSS SECTIONS OF THE LOWER COON MOUNTAIN PLUTON, DEL NORTE COUNTY, CALIFORNIA

By  
**Floyd Gray and Norman J Page**

1993

Page, N.J., Gray, Floyd, and Briscoe, Andrew, 1993, Petrology, mineralogy, and geochemistry of the Lower Coon Mountain pluton, northern California, with respect to the distribution of platinum-group elements: U.S. Geological Survey Bulletin 2014