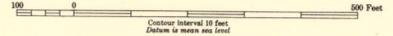


- EXPLANATION**
- Silicified carbonate rocks
 - Gray carbonate rock, commonly calcitic, and carbonate rock, unaltered
 - Brown dolomitic carbonate rocks
 - Aragonite vein
 - RARE-EARTH MINERALS FOUND IN SPOT SAMPLES**
(Mineralogy by H. W. Jaffe, 1961-62)
 - Bastnaesite
 - Parisite
 - Monazite
 - Allantite
 - Scheelite
 - Double circles indicate two rare-earth minerals present in sample. Triple circles indicate three rare-earth minerals
 - Breccia
 - Contact, showing dip, dashed where approximately located
 - Indefinite contact
 - Strike and dip of foliation in gneiss and schist, or streaked barite foliation in carbonate rocks
 - Strike of vertical foliation in gneiss and schist, or streaked barite foliation in carbonate rocks
 - Strike and dip of foliation in gneiss, with plunge of lineation
 - Strike and dip of barite, crocidolite, and chlorite crystals along shear planes in carbonate rocks
 - Strike of vertical barite, crocidolite, and chlorite crystals along shear planes in carbonate rocks
 - Fault zone, showing dip of individual shear
 - Vertical shear in fault zone
 - Pit, showing depth in feet
 - Shaft
 - Adit
 - Dump
 - 52C
 - Locality of sample
- Analyses given in tables 11, 12, and 13

Samples from general south-central area of Sulphide Queen carbonate body:
98, 108, 118, 128, 138, 148, 158, 168, 178, 188, 198, 208

MAP SHOWING GEOLOGIC AND MINERALOGIC FEATURES OF THE CARBONATE ROCK, AND LOCALITY OF SAMPLES, SULPHIDE QUEEN-BIRTHDAY AREA, MOUNTAIN PASS DISTRICT, SAN BERNARDINO COUNTY, CALIFORNIA



Geology and topography by D. R. Shaw, W. N. Sharp, L. C. Pray, and J. C. Olson, 1949-52