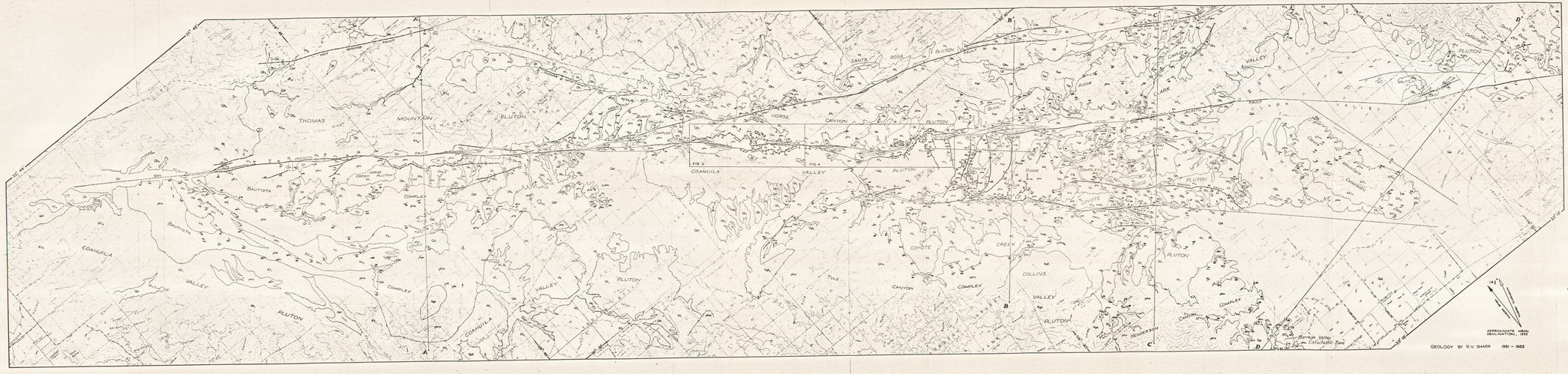
Sharp-RV-1963
GEOLOGY LIBRARY
California Institute of Technology

PLATE 1



GEOLOGY BY R.V. SHARP 1951 – 1953

EXPLANATION

CATACLASTICALLY DEFORMED ROCKS

- K^{T}_{S} ADAMELLITIC CATACLASITE
- K^{T}_{Q} TONALITIC CATACLASITE
- K^{T}_{C} MIXED CATACLASITES AND MARBLE-RICH METAMORPHIC ROCKS
- K^{T}_{M} MYLONITE

PLUTONIC ROCKS

- K_{Ts} FINE- TO MEDIUM-GRAINED BIOTITE ADAMELLITE
- K_{gs} MEDIUM- TO COARSE-GRAINED GARNET(PERA)S ADAMELLITE
- K_{d} MEDIUM-GRAINED ADAMELLITIC ROCKS :
  - K_{d_1} POORLY FOLIATED BIOTITE ADAMELLITE
  - K_{d_2} FOLIATED - BIOTITE ADAMELLITE
  - K_{d_3} FOLIATED HORNBLENDIC BIOTITE ADAMELLITE
  - K_{d_4} INCLUSION- RICH HORNBLENDIC BIOTITE ADAMELLITE
- K_{dg} MEDIUM-GRAINED GRANODIORITIC ROCKS :
  - K_{dg_1} HORNBLENDE - BIOTITE GRANODIORITE
  - K_{dg_2} INCLUSION- RICH HORNBLENDE - BIOTITE GRANODIORITE
- K_{gd} SEQUIGRANULAR BIOTITE GRANODIORITE AND ADAMELLITE :
  - K_{gd_1} BIOTITE GRANODIORITE
  - K_{gd_2} BIOTITE GRANODIORITE-TO ADAMELLITE (CONTACTS WITH INTRUSIVES NOT SHOWN)
- K_{dq} FINE- TO MEDIUM-GRAINED BIOTITE TONALITE AND GRANODIORITE
- K_{t} MEDIUM-GRAINED TONALITIC ROCKS :
  - K_{t_1} HORNBLENDE - BIOTITE TONALITE AND BIOTITE-HORNBLENDE TONALITE
  - K_{t_2} BIOTITE TONALITE
  - K_{t_3} FOLIATED HORNBLENDE - BIOTITE TONALITE
  - K_{t_4} INCLUSION- RICH HORNBLENDE - BIOTITE TONALITE
  - K_{t_5} HORNBLENDE - BIOTITE TONALITE WITH LARGE SPHENE CRYSTALS
- K_{q} GABBROIC ROCKS
  - K_{gb} OLIVINE-HORNBLENDE NORITE AND OLIVINE-HORNBLENDE GABBRO
  - K_{q} HORNBLENDE GABBRO AND HORNBLENDE LEUCOGABBRO

METAMORPHIC ROCKS

- pK_{m} MIGMATITIC GNEISS WITH MINOR QUARTZITE, MARBLE, AMPHIBOLITE AND META-CONGLOMERATE. INCLUDES SMALL UNMAPPED BODIES OF HORNFELSIC ROCKS, QUARTZ VEINS, GRANITE PEGMATITE, AND OTHER MYRIOPHYTES COMPOSITIONALLY EQUIVALENT TO MAPPED BODIES.

SEDIMENTS

- Qal ALLUVIUM
- Qt TERRACE GRAVELS AND SANDS
- Qs BAUTISTA BEDS
  - Q_G GRAVELS
  - Q_S SANDS
  - Q_C SILTS AND CLAYS

UNCONFORMITY

QUATERNARY / PLEISTOCENE / RECENT

UNCONFORMITY

CRETACEOUS / UPPER CRETACEOUS / PRE-CRETACEOUS

LATE CRETACEOUS

CONTACT
DASHED WHERE APPROXIMATELY LOCATED
QUESTIONED WHERE DOUBTFUL

GRADATIONAL CONTACT
APPROXIMATELY LOCATED

FAULT, INTRUSIVE DIP
DASHED WHERE APPROXIMATELY LOCATED
QUESTIONED WHERE DOUBTFUL
D - INDICATES SIDE OF DOWNTHROWN SIDE

THRUST FAULT AND KLIPPE
DASHED WHERE APPROXIMATELY LOCATED
QUESTIONED WHERE DOUBTFUL
BARBS ON UNDERTHRUST PLATE

STRIKE AND DIP OF BEDDING

STRIKE AND DIP OF OVERTURNED BEDDING

STRIKE AND TOP OF FOLIATION

STRIKE AND DIP OF VERTICAL FOLIATION

FOLIATION, PITCH BEARING AND PLUNGE OF LINEATION

SCARPS AND PLUNGE OF SLICKENSIDES

0 0.5 1 2 3 4 5 6 7 MILES

CONTOUR INTERVAL 80 FEET

GENERALIZED GEOLOGIC MAP OF THE SAN JACINTO FAULT ZONE IN PART OF THE PENINSULAR RANGES, SOUTHERN CALIFORNIA

GEOLOGY LIBRARY
California Institute of Technology