S35E V N35W MINE LEVEL V'-355W V'N55E X'-354W X'-N8E

No.3 shaft
dump
No.4 shaft
gossan inferred
Tertiary gravel
partially silicified
projected southward about 50 feet
ore projected above this point
WEST ALTERATION ZONE
EAST ALTERATION ZONE
HINCHLEY ALTERATION ZONE
W
U
S
Interpretation below 1100 level is based on data from company maps
Campo Seco fault
possible trace of mineralized zone
ore shown by Tolman
No.3 underground shaft
section offset 200 feet
probable footwall of mineralized zone

Sea level
-500'
-1000'
-1500'
-2000'
-2500'
-3000'

300 400 500 600 700 900 1000 1100 1200 1400 1700 1900 2100 2200 2400 2600 2700 2800 3400

7a 7b 7 L 8b 8a M

Kruttschnitt ore blocks
Kruttschnitt ore blocks
elevation approximate

VERTICAL PROJECTION

EXPLANATION

- Shaft or raise
- Crosscut toward observer
- Crosscut away from observer
- Gossan
- Ore mined
- Ore in place
- Stringers of sulphides
- Pitch of minor folds

Grades of samples

- more than 4 percent copper
- 2 to 4 percent copper
- trace to 2 percent copper
- Area favorable for exploration
- 8b Ore body number

SECTION V-V', X-X'

EXPLANATION

- Gossan
- Ore mined
- Massive ore
- Stringers of sulphides
- Undifferentiated schist and greenstone
- Sericitized schist
- Sericitized and silicified schist
- Quartz porphyry
- Sericitized quartz porphyry
- Sericitized and silicified quartz porphyry

Stratigraphic units

- Meta-andesite and meta-dacite pyroclastics
- Meta-rhyolite tuff
- Meta-felsite pyroclastics
- b - intercalated meta-basalt
- Meta-agglomerate and tuff
- Meta-basalt
- Meta-felsite volcanics
- s schist, presumably sericite schist - below 1000 level
- g greenstone - below 1000 level
- Geologic contact
- Fault
- Workings not in plane of section
- W Area favorable for exploration, referred to in text

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

VERTICAL PROJECTION
AND
SECTION V-V', X-X'
No.3 SHAFT AREA
PENN MINE
Calaveras County, California

0 100 200 300 400 500 feet
Elevation datum sea level

Source of data:
Stopes above 1100 level from section by H.S Jordan dated March 1919
Stopes and assay data below 1900 level from report by Julius Kruttschnitt, 1926
Outline of workings from company maps
Geology by Geological Survey, 1943-44-45