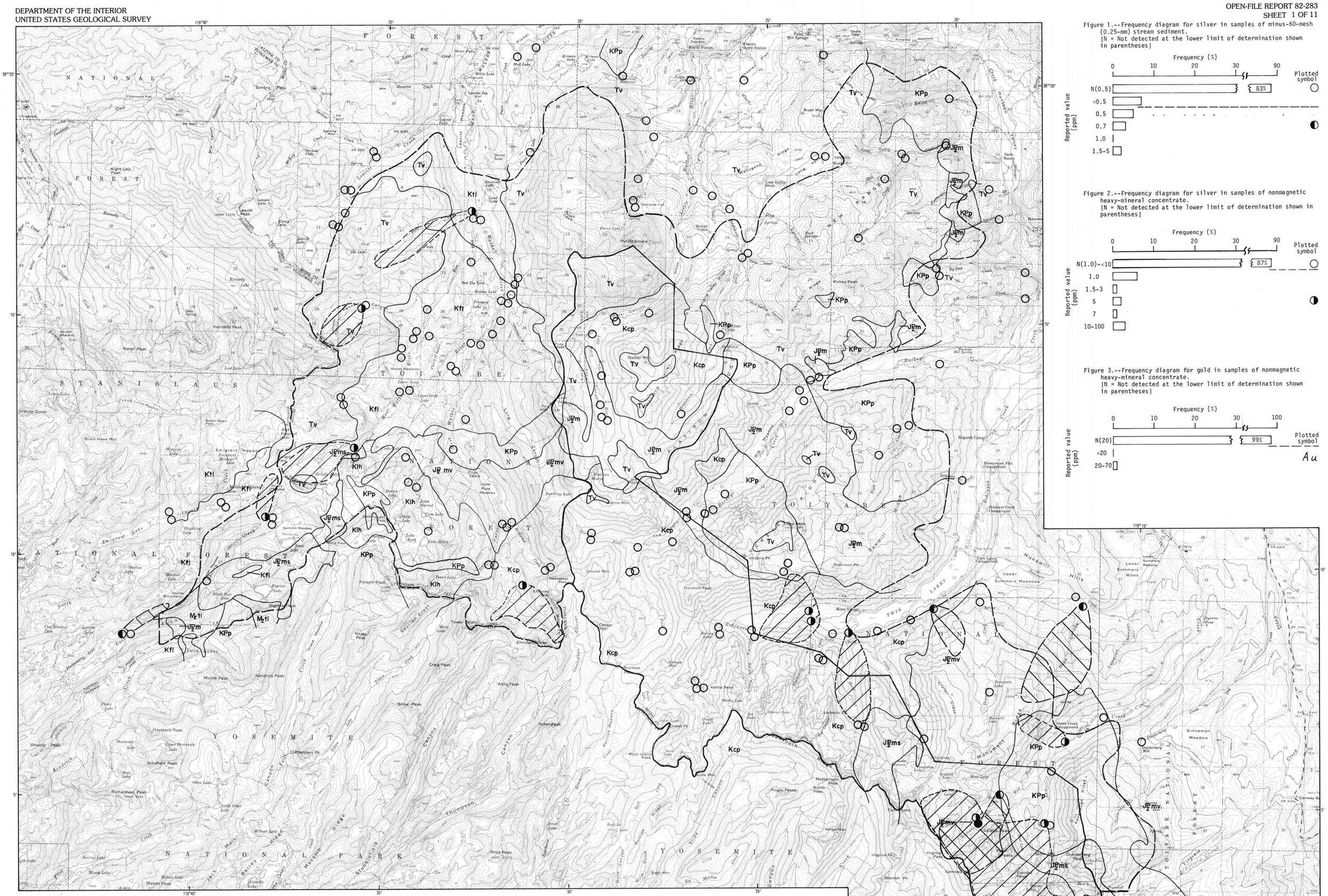
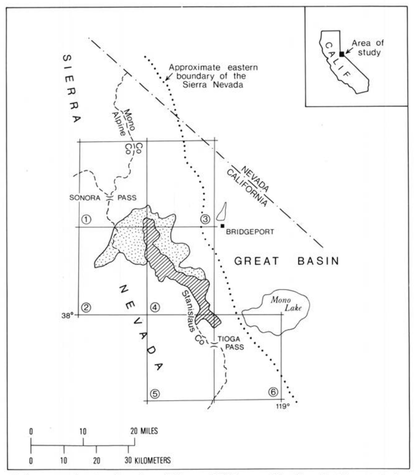


Figure 1.--Frequency diagram for silver in samples of minus-60-mesh (0.25-mm) stream sediment.
[N = Not detected at the lower limit of determination shown in parentheses]

Figure 2.--Frequency diagram for silver in samples of nonmagnetic heavy-mineral concentrate.
[N = Not detected at the lower limit of determination shown in parentheses]

Figure 3.--Frequency diagram for gold in samples of nonmagnetic heavy-mineral concentrate.
[N = Not detected at the lower limit of determination shown in parentheses]



Index map showing location of Hoover Wilderness (lined) and adjacent study area (stippled), California. Numbers indicate 15-minute quadrangles: (1) Sonora Pass, (2) Tower Peak, (3) Fales Hot Springs, (4) Matterhorn Peak, (5) Tuolumne Meadows, and (6) Mono Craters.

Base from U.S. Geological Survey
Mono Craters, 1953; Fales Hot Springs,
Matterhorn Peak, Sonora Pass,
Tower Peak, Tuolumne Meadows, 1956;
Bodie, 1958

LIST OF MAP UNITS

Tv	VOLCANIC FLOWS, BRECCIAS, AND LAHARS VARYING IN COMPOSITION FROM RHYOLITE TO BASALT (Tertiary)--Includes Disaster Peak Formation of Slemmons (1966), Stanislaus Group, Relief Peak Formation of Slemmons (1966), Valley Springs Formation, and intrusive andesite
Kcp	CATHEDRAL PEAK GRANODIORITE (Cretaceous)
Ktl	GRANODIORITE OF TOPAZ LAKE (Cretaceous)
Kfl	GRANODIORITE OF FREMONT LAKE (Cretaceous)
Klh	GRANODIORITE OF LAKE HARRIET (Cretaceous)
$M_z$tl	GABBRO OF TWIN LAKES (Mesozoic)
KPp	PLUTONIC ROCKS, UNDIVIDED, OF PREDOMINANTLY GRANITIC TO GRANODIORITIC COMPOSITION (Cretaceous to Permian(?))--Includes granite of Eagle Creek, granodiorite of Buckeye Creek, granodiorite of Green Creek, granodiorite of Long Canyon, alaskite of Grace Meadow, granite of upper Twin Lakes, granodiorite of Bond Pass, granodiorite of Mono Dome, granite of Dorothy Lake, granodiorite of Log Cabin Creek, granite of Devils Gate, gabbro of Mount Warren, and quartz diorite of Odell Lake
JP$_z$ms	METASEDIMENTARY ROCKS, UNDIVIDED (Jurassic to Paleozoic)--Represent roof-pendant material in the Sierra Nevada batholith
JP$_z$mv	METAVOLCANIC AND METAPLUTONIC ROCKS, UNDIVIDED (Jurassic to Paleozoic)--Represent roof-pendant material in the Sierra Nevada batholith
JP$_z$m	METASEDIMENTARY, METAVOLCANIC, AND METAPLUTONIC ROCKS, UNDIVIDED (Jurassic to Paleozoic)--Represent roof-pendant material in the Sierra Nevada batholith

EXPLANATION

- Approximate boundary of the Hoover Wilderness
- Approximate boundary of the adjacent study area
- Geologic contact
- Sample site, stream-sediment sample only contains anomalous silver
- Sample site, concentrate sample only contains anomalous silver
- Sample site, both samples contain anomalous silver
- Sample site, neither type of sample is anomalous
- Approximate limit of drainage basin(s) for stream-sediment samples containing anomalous silver
- Approximate limit of drainage basin(s) for concentrate samples containing anomalous silver and(or) gold
- Au-20 Sample site, anomalous gold in concentrate sample Concentration in parts per million

APPROXIMATE MEAN DECLINATION, 1983

SCALE 1:62 500

1 ½ 0 1 2 3 4 MILES

1 .5 0 1 2 3 4 KILOMETERS

CONTOUR INTERVAL 80 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Geology by W.J. Keith and J.F. Seitz, 1978,1979

SHEET 1.—ANOMALIES FOR SILVER IN SAMPLES OF STREAM SEDIMENT AND CONCENTRATE AND FOR GOLD IN SAMPLES OF CONCENTRATE

GEOCHEMICAL ELEMENT MAPS OF THE HOOVER WILDERNESS AND ADJACENT STUDY AREA, MONO AND TUOLUMNE COUNTIES, CALIFORNIA

By
M. A. Chaffee, R. H. Hill, and S. J. Sutley

1983