

Figure 1-A.—Histogram for silver in 287, nonmagnetic, heavy-mineral concentrate samples from the Chichagof-Yakobi Wilderness Study Area. Symbols denote anomalous concentrations and class percentages computed on total sample population. Analysis by optical emission spectroscopy (Grimes and Marranzino, 1968). Ninety-five percent of the samples have no reported values. The remaining five percent (14 samples) have values ranging from 0.5 to 50 parts per million.

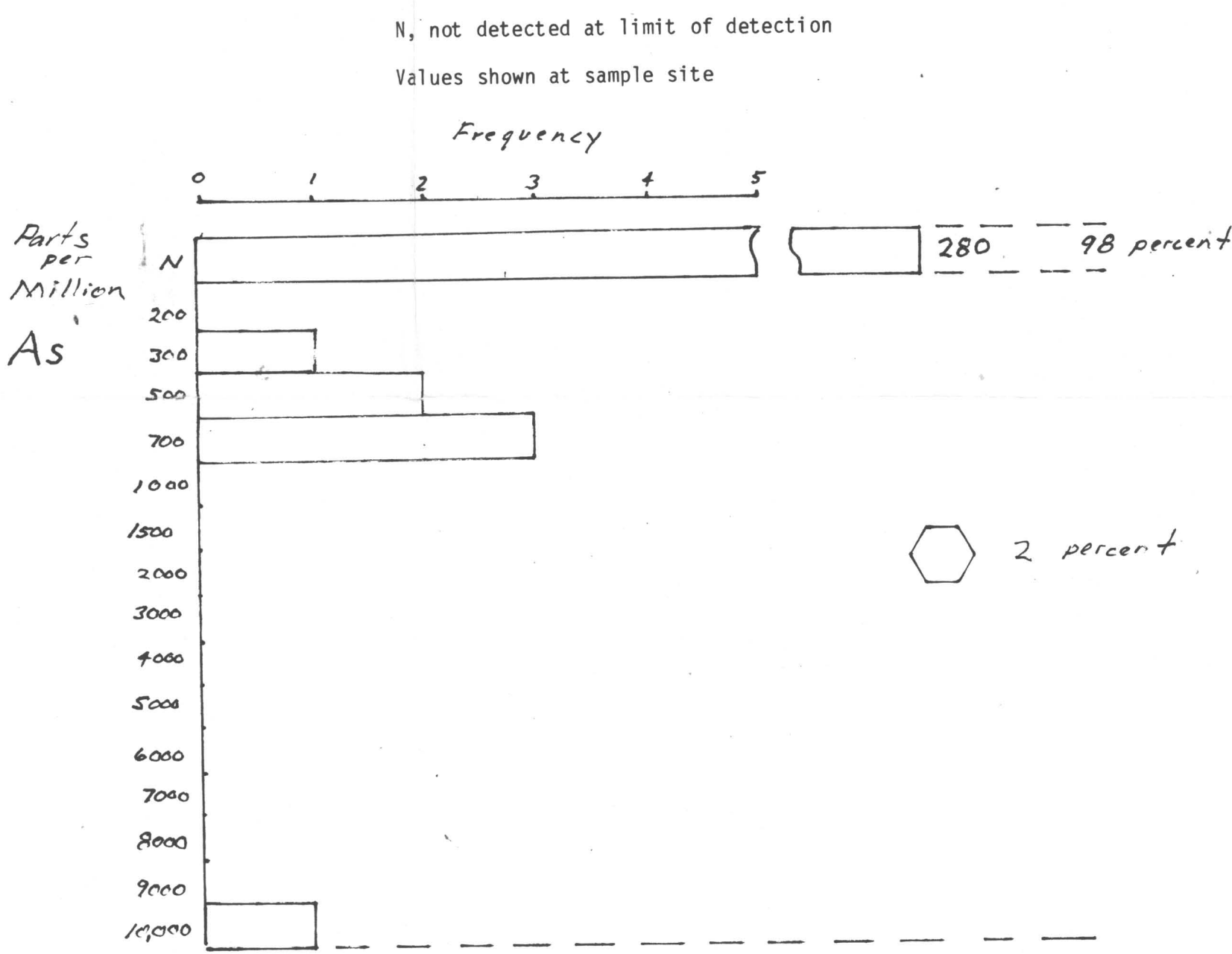


Figure 1-B.—Histogram for arsenic in 287, nonmagnetic, heavy-mineral concentrate samples from the Chichagof-Yakobi Wilderness Study Area. Symbols denote anomalous concentrations and class percentages computed on total sample population. Analysis by optical emission spectroscopy (Grimes and Marranzino, 1968). Ninety-eight percent of the samples have no reported values. The remaining two percent (7 samples) have values ranging from 300 to 10,000 parts per million.

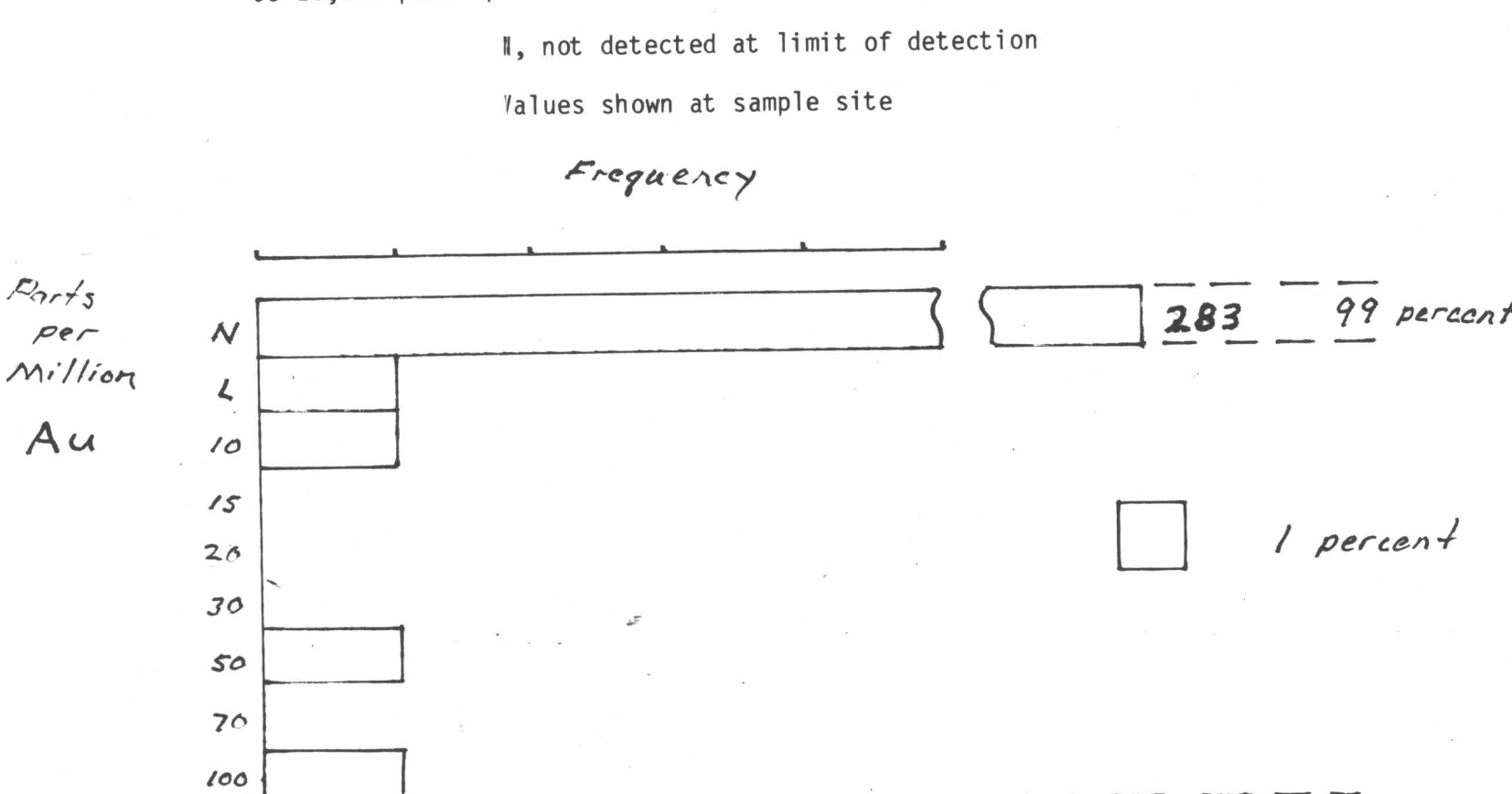


Figure 1-C.—Histogram for gold in 287, nonmagnetic, heavy-mineral concentrate samples from the Chichagof-Yakobi Wilderness Study Area. Symbols denote anomalous concentrations and class percentages computed on total sample population. Analysis by optical emission spectroscopy (Grimes and Marranzino, 1968). Ninety-nine percent of the samples have no reported values. The remaining one percent (4 samples) have values ranging from less than 5 to 100 parts per million.

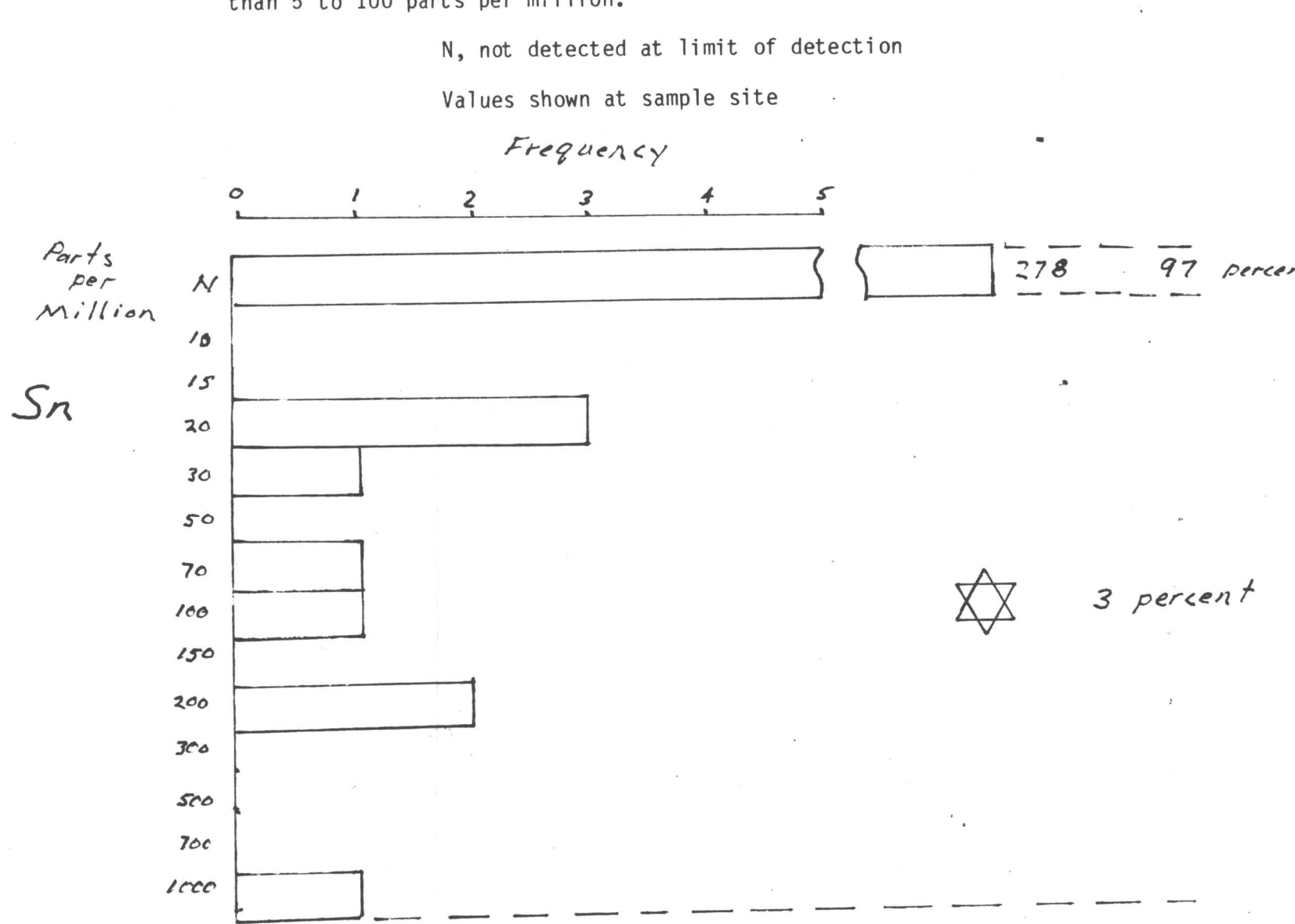


Figure 1-D.—Histogram for tin in 287, nonmagnetic, heavy-mineral concentrate samples from the Chichagof-Yakobi Wilderness Study Area. Symbols denote anomalous concentrations and class percentages computed on total sample population. Analysis by optical emission spectroscopy (Grimes and Marranzino, 1968). Ninety-seven percent of the samples have no reported values. The remaining three percent (5 samples) have values ranging from 20 to 1,000 parts per million.

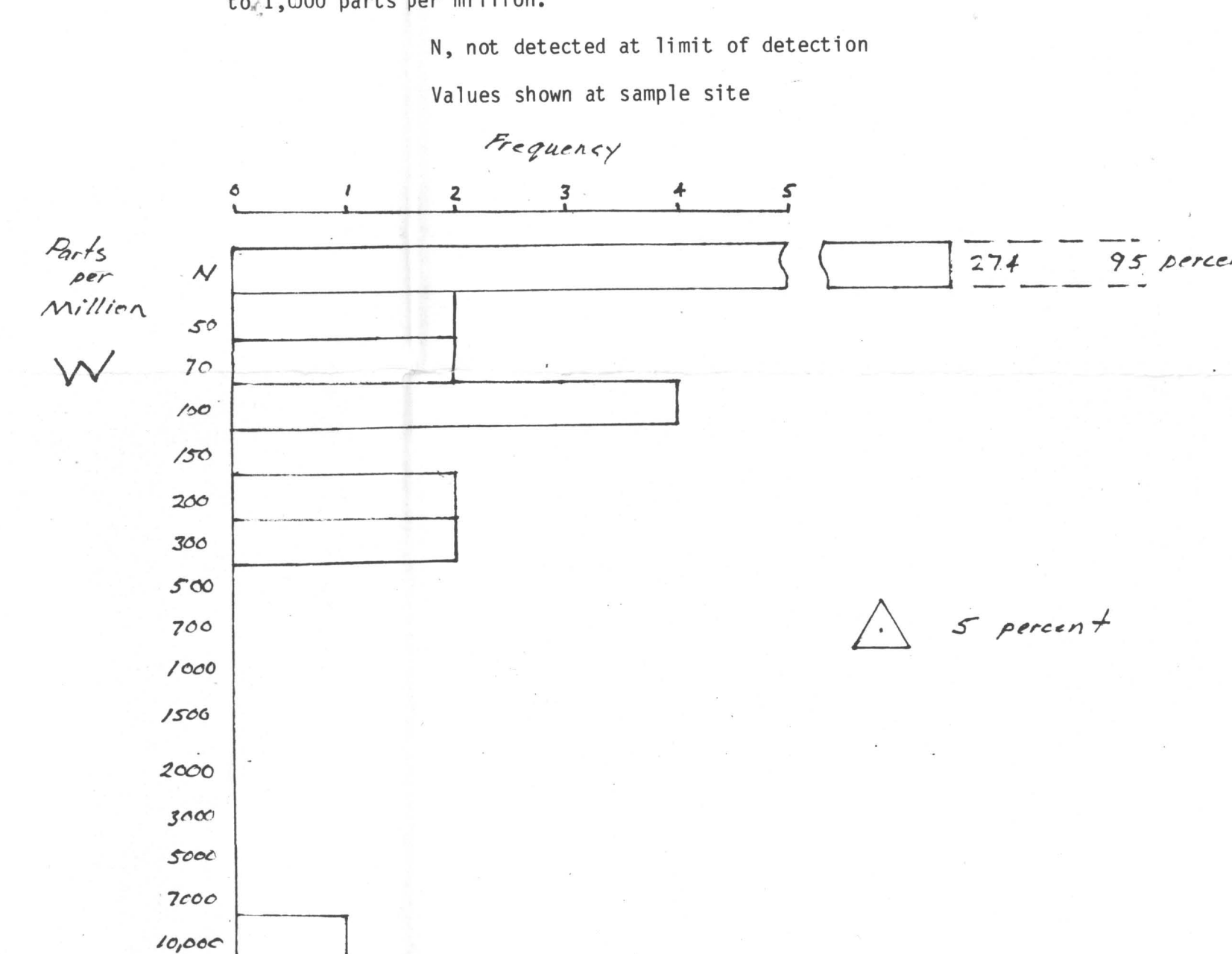


Figure 1-E.—Histogram for tungsten in 287, nonmagnetic, heavy-mineral concentrate samples from the Chichagof-Yakobi Wilderness Study Area. Symbols denote anomalous concentrations and class percentages computed on total sample population. Analysis by optical emission spectroscopy (Grimes and Marranzino, 1968). Ninety-five percent of the samples have no reported values. The remaining five percent (13 samples) have values ranging from 50 to 10,000 parts per million.

GEOCHEMICAL MAP SHOWING THE DISTRIBUTION AND ABUNDANCE OF SILVER, ARSENIC, GOLD, TIN, AND TUNGSTEN IN THE NONMAGNETIC, HEAVY-MINERAL CONCENTRATE SAMPLES IN THE WEST CHICHAGOF-YAKOBI WILDERNESS STUDY AREA, SITKA QUADRANGLE, SOUTHEASTERN ALASKA

Studies Related to Wilderness

The Wilderness Act (Public Law 88-577, Sept. 3, 1964) and related Acts require the U.S. Geological Survey to survey certain areas on Federal lands to determine their mineral resource potential. Results must be made available to the public and be submitted to the President and the Congress. This report presents the results of a geochemical survey of the West Chichagof-Yakobi Wilderness Study Area, Sitka quadrangle, southeastern Alaska.

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CORRELATION OF MAP UNITS

Qa1	QUATERNARY
Tf	TERTIARY(?)
Kd	CRETACEOUS(?)
Ks	CRETACEOUS
Kkb	CRETACEOUS AND JURASSIC
Kjf	TRIASSIC(?)
Kjm	MESOZOIC AND PALEOZOIC(?)
Trw	
Trg	
MePau	

LIST OF MAP UNITS

Qa1 ALLUVIAL DEPOSITS—Undivided
Tf FELSIC PLUTONIC ROCKS—Dominantly tonalitic
Tn METAFELSIC PLUTONIC ROCKS—Dominantly gabbroic
Kd DIORITE SILL—Extensively altered
Ks SITKA GRANITE
Kkb KREEP BAY GROUP—Metasediments and metavolcanics
Kjf FELSIC PLUTONIC ROCKS—Dominantly granodiorite
Kjm METAFELSIC PLUTONIC ROCKS—Dominantly quartz diorite, diorite, and gabbro
Trw WHITESTRIPE MARBLE
Trg COON DIP GREENSTONE
MePau UNDIVIDED METASEDIMENTARY—Metavolcanic and metaplutonic rocks