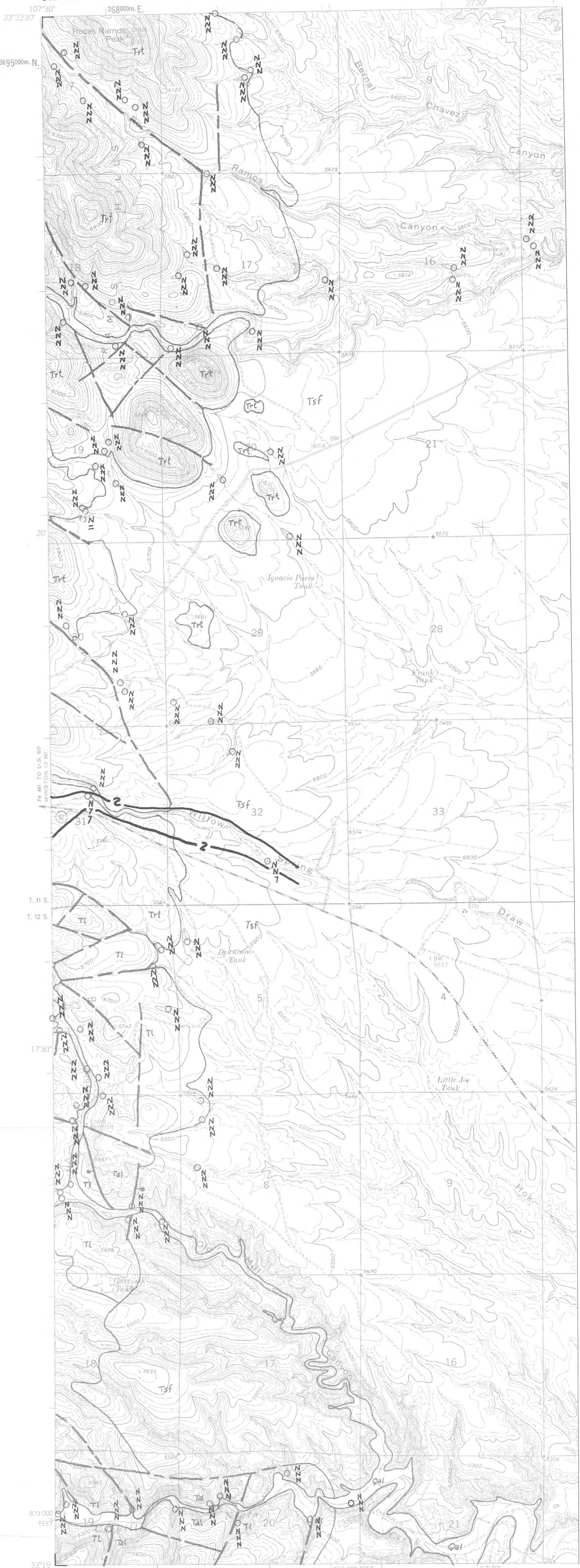


DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY



Base from U.S. Geological Survey, 1961
Reconnaissance and photogeology by
H. V. Alminas and K. C. Watts

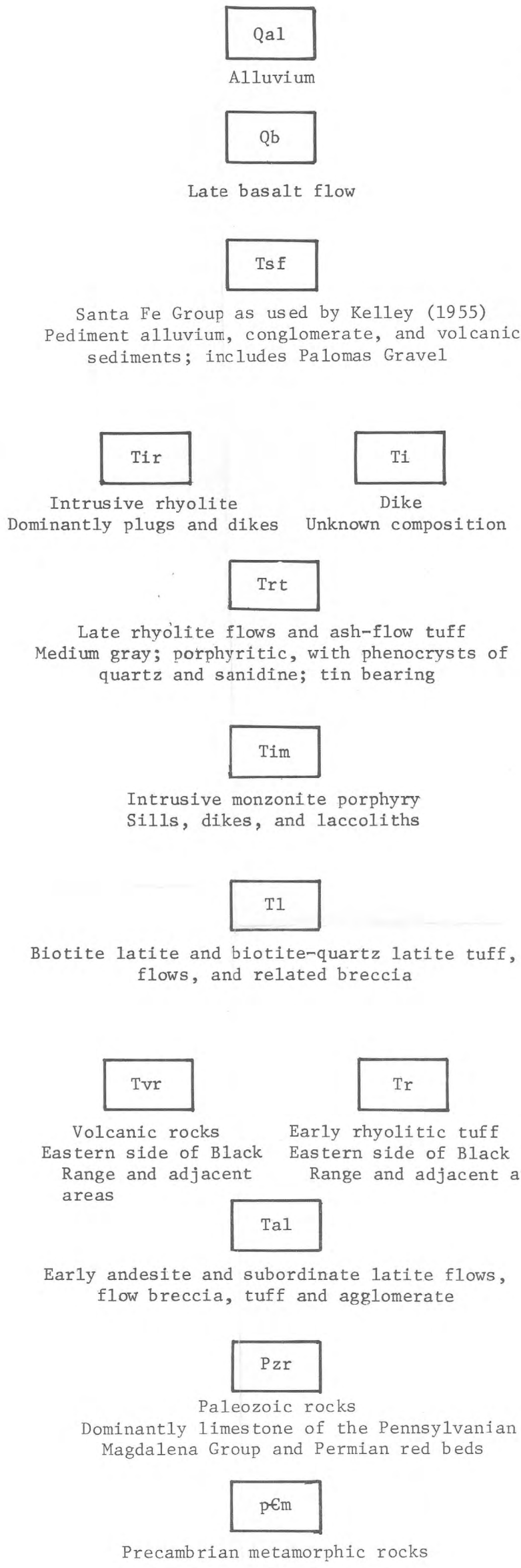
SCALE 1:24 000
0 1/2 1 MILE
0 0.5 1 KILOMETER
CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

WEST PART OF THE PRIEST TANK QUADRANGLE
MAPS SHOWING SILVER AND GOLD DISTRIBUTION IN THE WINSTON AND
CHISE QUADRANGLES AND IN THE WEST PART OF THE PRIEST TANK
QUADRANGLE, SIERRA COUNTY, NEW MEXICO

By
Henry V. Alminas, Kenneth C. Watts, and David L. Siems

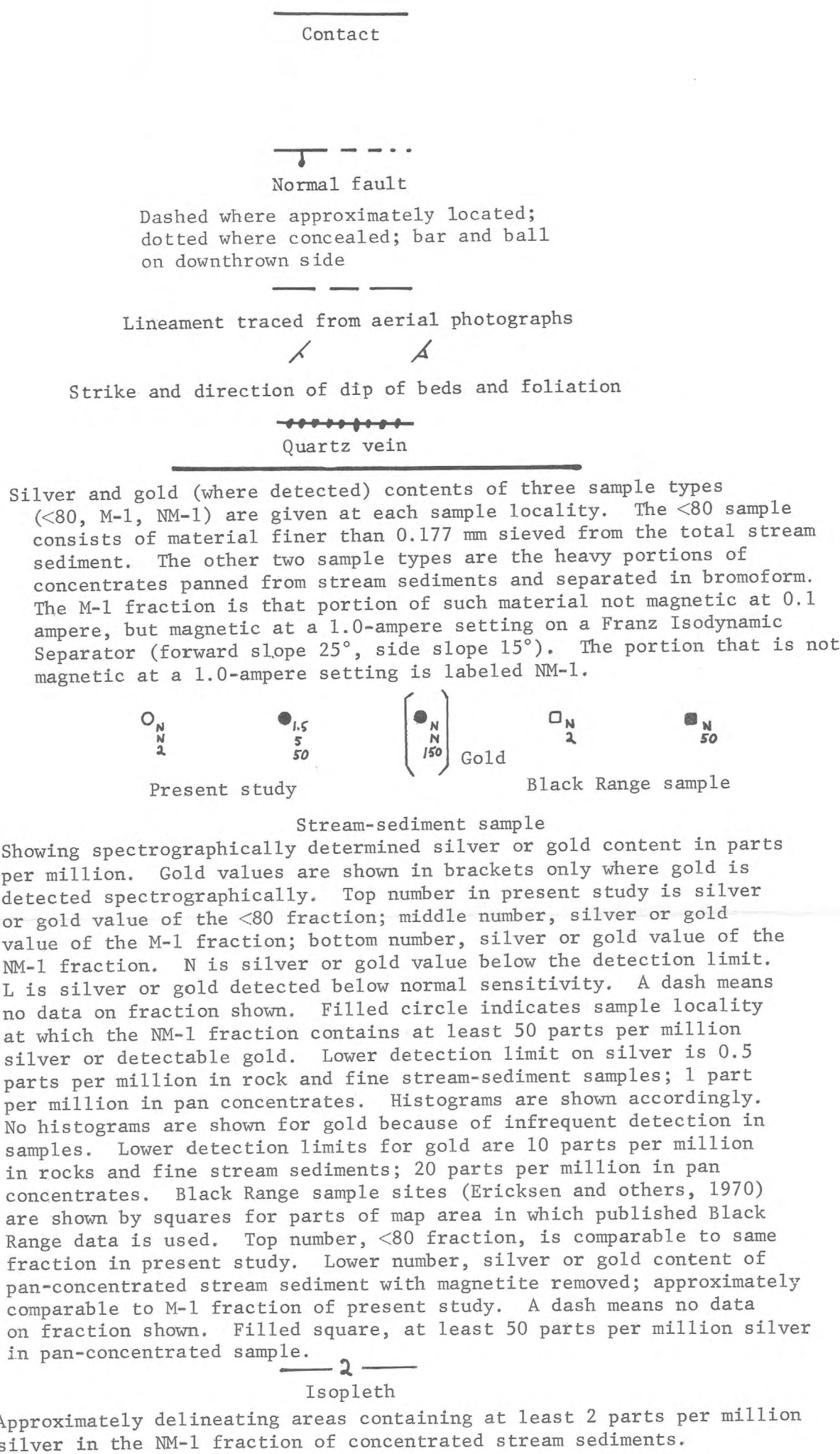
For sale by U.S. Geological Survey, price \$1.50 per set

EXPLANATION



QUATERNARY

TERTIARY

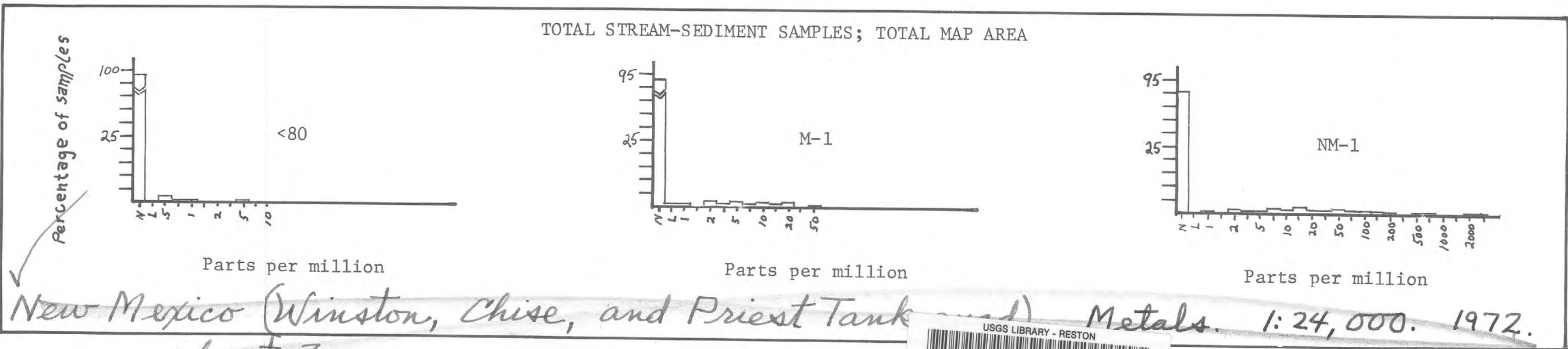
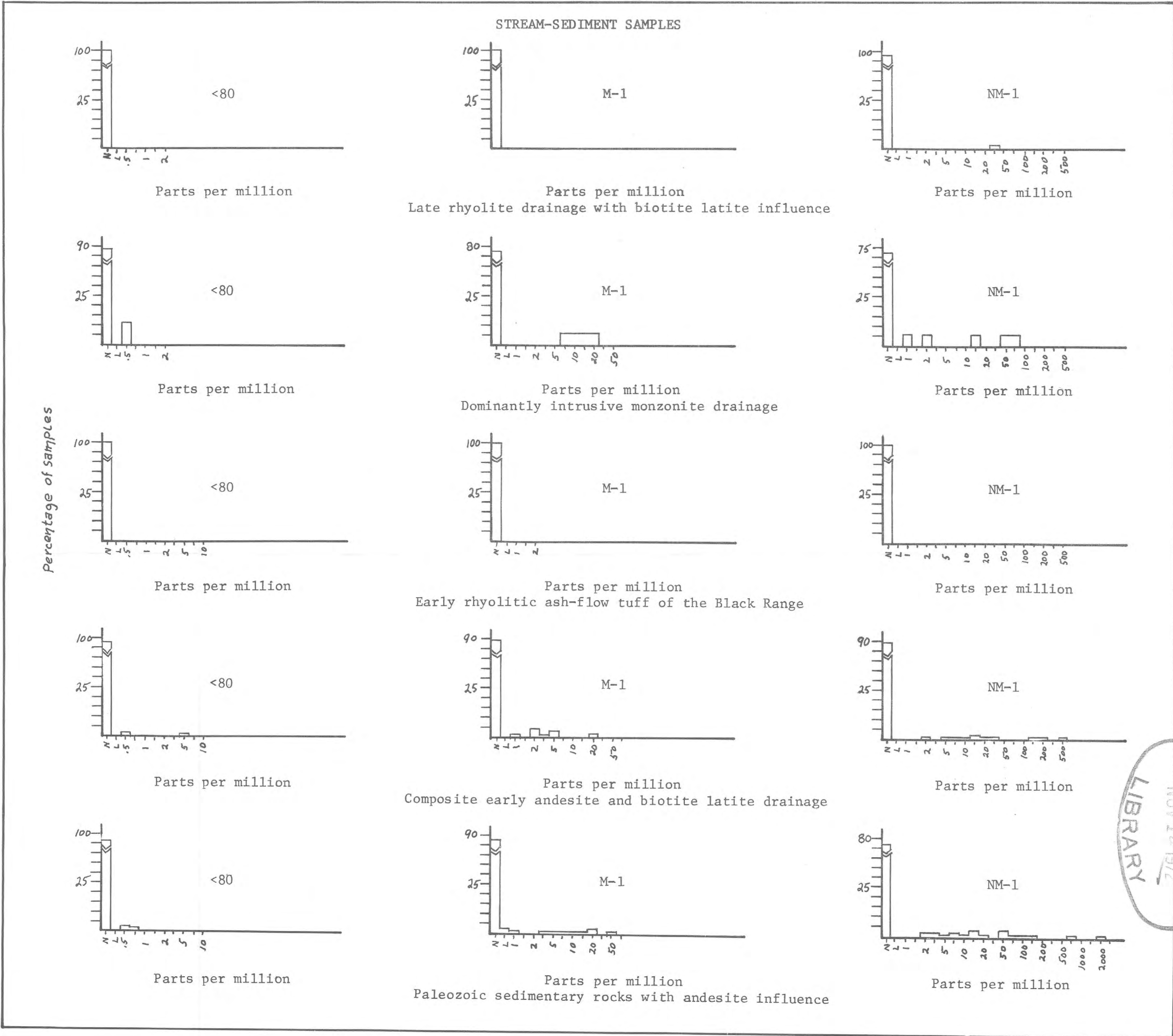
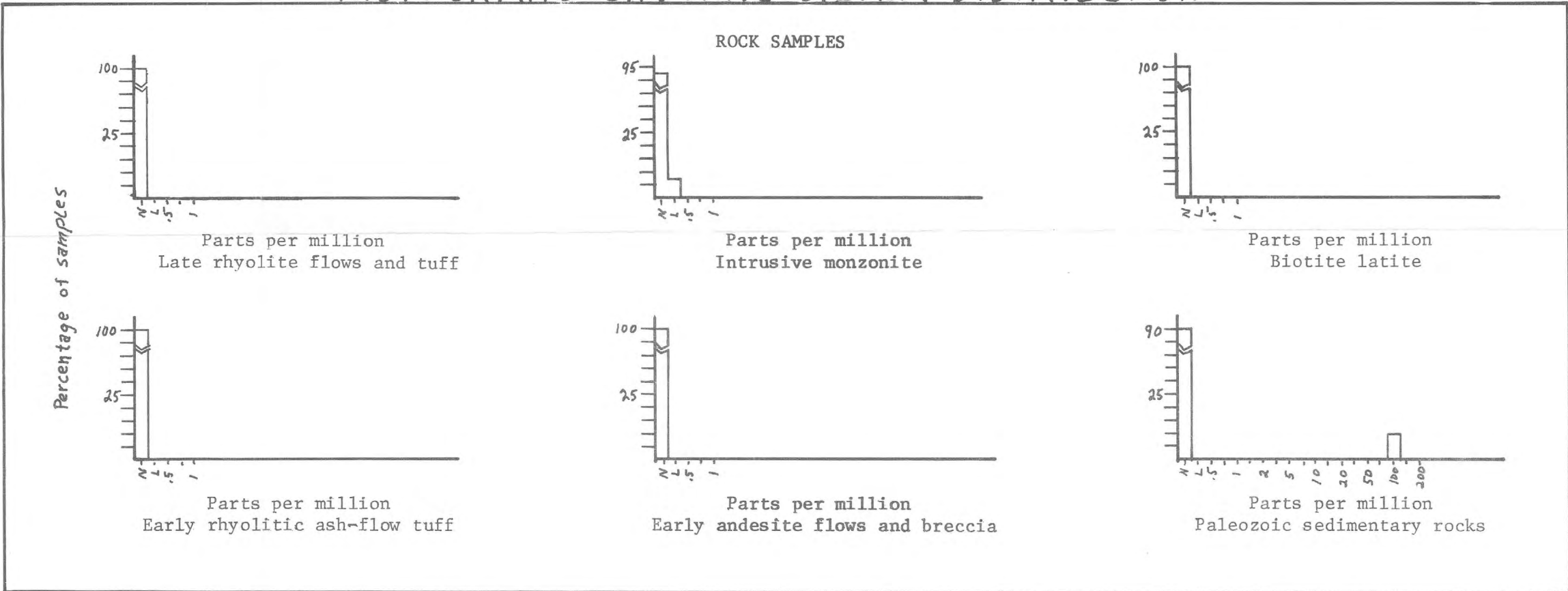


Silver and gold (where detected) contents of three sample types (<80, M-1, NM-1) are given at each sample locality. The <80 sample consists of material finer than 0.177 mm sieved from the total stream sediment. The other two sample types are the heavy portions of concentrates panned from stream sediments and separated in bromoform. The M-1 fraction is that portion of such material not magnetic at 0.1 ampere, but magnetic at a 1.0-ampere setting on a Franz Isodynamic Separator (forward slope 25°, side slope 15°). The portion that is not magnetic at a 1.0-ampere setting is labeled NM-1.

Showing spectrographically determined silver or gold content in parts per million. Gold values are shown in brackets only where gold is detected spectrographically. Top number in present study is silver or gold value of the <80 fraction; middle number, silver or gold value of the M-1 fraction; bottom number, silver or gold value of the NM-1 fraction. N is silver or gold value below the detection limit. L is silver or gold detected below normal sensitivity. A dash means no data on fraction shown. Filled circle indicates sample locality at which the NM-1 fraction contains at least 50 parts per million silver or detectable gold. Lower detection limit on silver is 0.5 parts per million in rock and fine stream-sediment samples; 1 part per million in pan concentrates. Histograms are shown accordingly. No histograms are shown for gold because of infrequent detection in samples. Lower detection limits for gold are 10 parts per million in rocks and fine stream sediments; 20 parts per million in pan concentrates. Black Range sample sites (Ericksen and others, 1970) are shown by squares for parts of map area in which published Black Range data is used. Top number, <80 fraction, is comparable to same fraction in present study. Lower number, silver or gold content of pan-concentrated stream sediment with magnetite removed; approximately comparable to M-1 fraction of present study. A dash means no data on fraction shown. Filled square, at least 50 parts per million silver in pan-concentrated sample.

References
Ericksen, G. E., and others, 1970, Mineral resources of the Black Range Primitive Area, Grant, Sierra, and Catron Counties, New Mexico: U.S. Geol. Survey Bull. 1319-E, p. 49-157.
Jahns, R. H., 1955, Road log in Sierra Cuchillo and neighboring areas [and] Geology of the Sierra Cuchillo, New Mexico, in New Mexico Geol. Soc. Guidebook 6th Field Conf., south-central New Mexico, 1955, p. 25-46, 158-174.
Kelley, V. C., compiler, 1955, Geologic map of the Sierra County region in New Mexico Geol. Soc. Guidebook 6th Field Conf., south-central New Mexico, 1955: In pocket.

HISTOGRAMS SHOWING SILVER DISTRIBUTION



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New Mexico Winston, Chise, and Priest Tank
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