EXPLANATION FOR FIGURE 12

SYMBOL	ppm—RANGE	NO. IN CLASS	PERCENTILE
+	<50	459	0–65
○ Printed value	50	143	65–85
	>50	108	≥85
		Total 710	

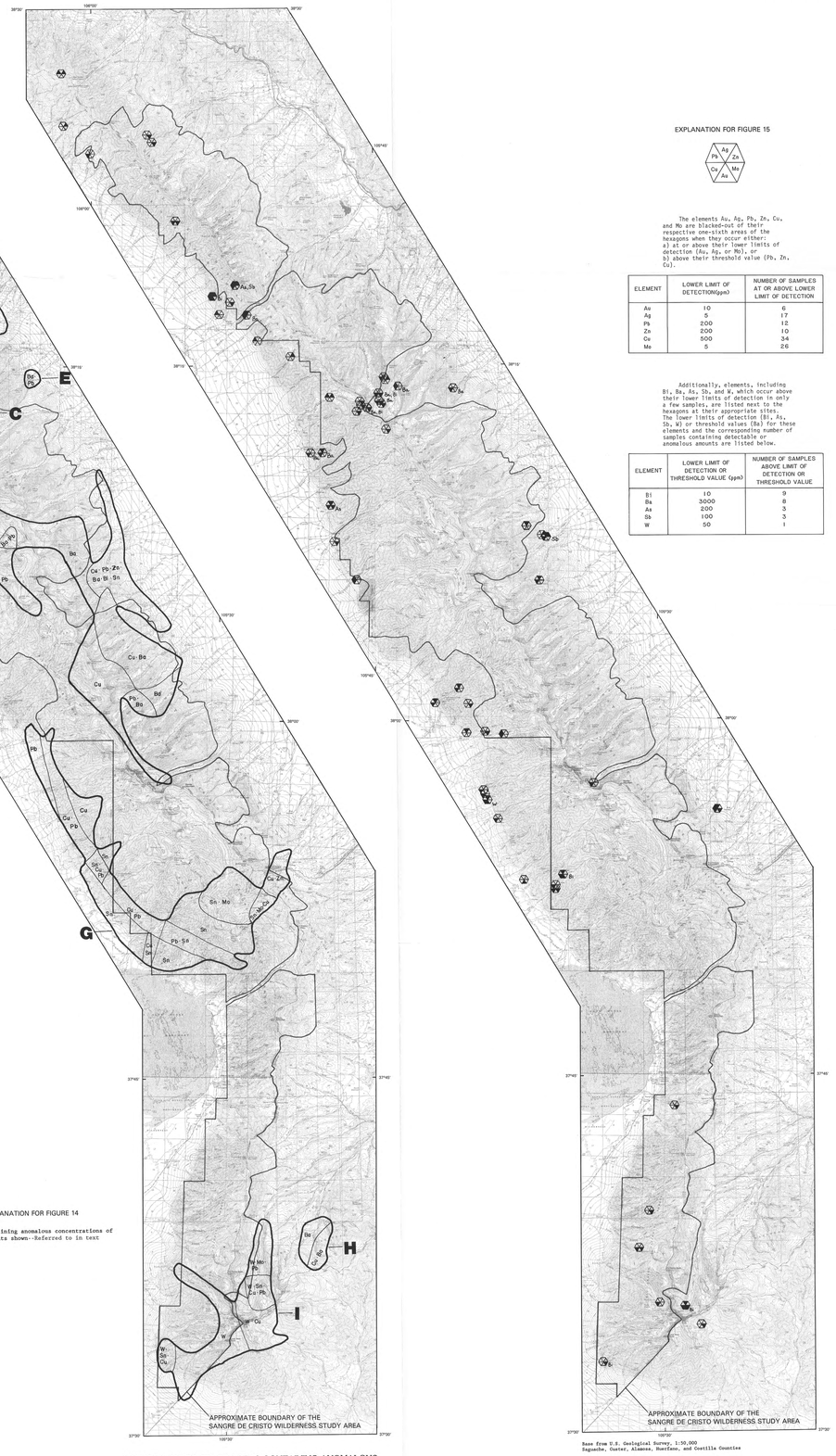
Area containing anomalous concentrations of Sn--Referred to in text

FIGURE 12.-Sn IN HEAVY-MINERAL-CONCENTRATE SAMPLES

EXPLANATION FOR FIGURE 13

Au ○ ≥200 ppm, N=2 samples
Bi △ ≥20 ppm, N=18 samples
Zn ▽ ≥500 ppm, N=8 samples

FIGURE 13.-Au, Bi, AND Zn IN HEAVY-MINERAL-CONCENTRATE SAMPLES



EXPLANATION FOR FIGURE 14

Area containing anomalous concentrations of elements shown--Referred to in text

FIGURE 14.-SUMMARY OF AREAS CONTAINING ANOMALOUS ELEMENTS IN HEAVY-MINERAL-CONCENTRATE SAMPLES

EXPLANATION FOR FIGURE 15

The elements Au, Ag, Pb, Zn, Cu, and Mo are blacked-out of their respective one-sixth areas of the hexagons when they occur either:
a) at or above their lower limits of detection (Au, Ag, or Mo), or
b) above their threshold value (Pb, Zn, Cu).

ELEMENT	LOWER LIMIT OF DETECTION(ppm)	NUMBER OF SAMPLES AT OR ABOVE LOWER LIMIT OF DETECTION
Au	10	6
Ag	5	17
Pb	200	12
Zn	200	10
Cu	500	34
Mo	5	26

Additionally, elements, including Bi, Ba, As, Sb, and W, which occur above their lower limits of detection in only a few samples, are listed next to the hexagons at their appropriate sites. The lower limits of detection (Bi, As, Sb, W) or threshold values (Ba) for these elements and the corresponding number of samples containing detectable or anomalous amounts are listed below.

ELEMENT	LOWER LIMIT OF DETECTION OR THRESHOLD VALUE (ppm)	NUMBER OF SAMPLES ABOVE LIMIT OF DETECTION OR THRESHOLD VALUE
Bi	10	9
Ba	3000	8
As	200	3
Sb	100	3
W	50	1

Base from U.S. Geological Survey, 1:50,000
Saguache, Custer, Alamosa, Huerfano, and Costilla Counties

FIGURE 15.-ANOMALOUS ELEMENTS IN ROCK SAMPLES

SCALE 1:125 000

2 0 2 4 6 8 MILES

2 0 2 4 6 8 KILOMETERS

CONTOUR INTERVAL 80 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

MAPS SHOWING TRACE-ELEMENT GEOCHEMISTRY OF THE SANGRE DE CRISTO WILDERNESS STUDY AREA, SOUTH-CENTRAL COLORADO

By
David R. Zimbelman
1989

Manuscript approved for publication, June 15, 1988

Any use of trade names in this publication is for descriptive purposes only and does not imply endorsement by the U.S. Geological Survey

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1989

For sale by U.S. Geological Survey Map Distribution, Box 25286, Federal Center, Denver, CO 80225