

Figure 1.—Soil, rock, and mineral sample localities, shown in relation to outcrop of rock units.

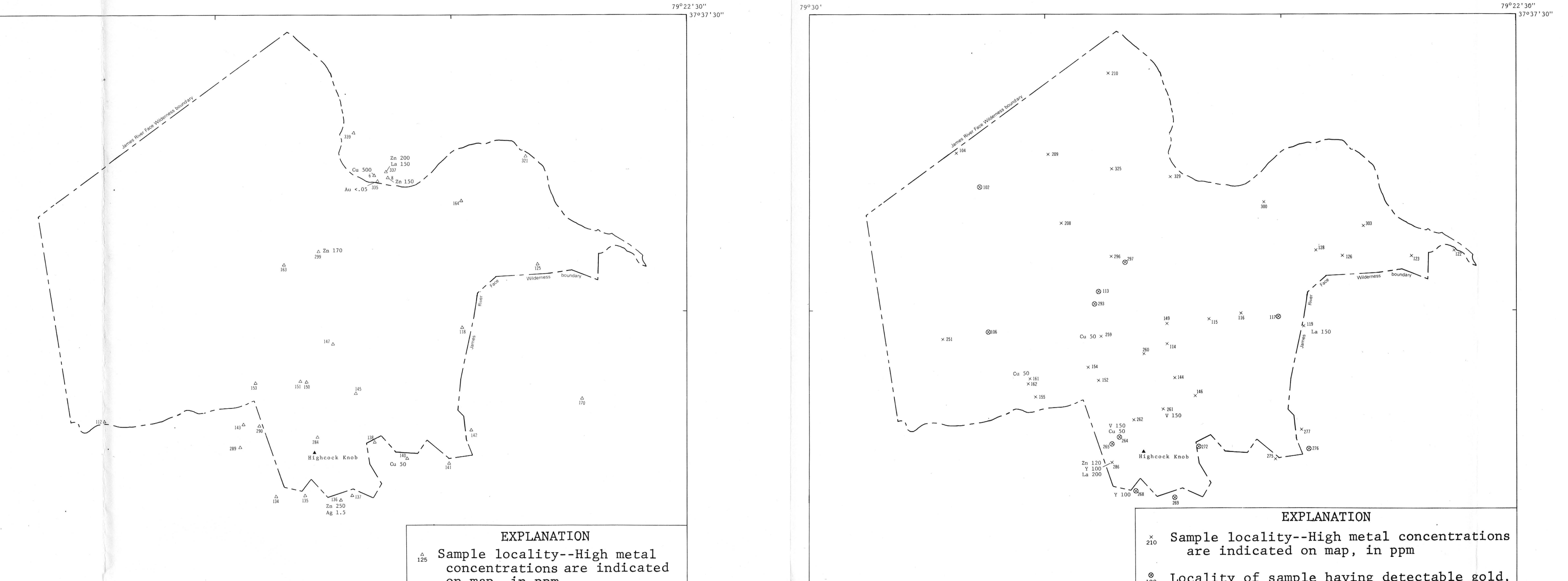


Figure 3.—Histograms showing distribution of selected elements in samples analyzed by means of six-step semiquantitative spectrographic methods. Data from atomic-absorption analyses for zinc are grouped in six steps per order of magnitude (Motooka and Grimes, 1976, p. 2). All data are in parts per million (ppm).

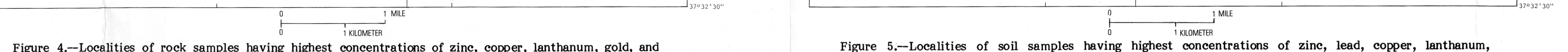


Figure 4.—Localities of rock samples having highest concentrations of zinc, copper, lanthanum, gold, and silver.

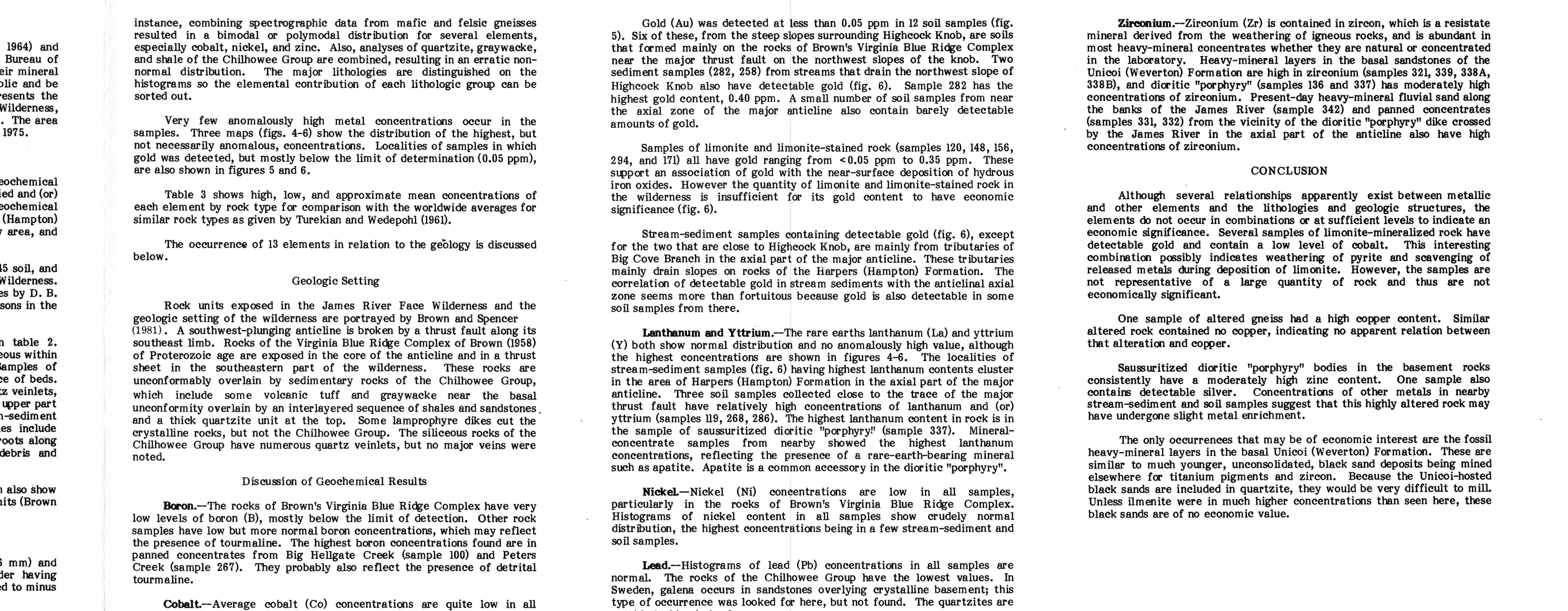
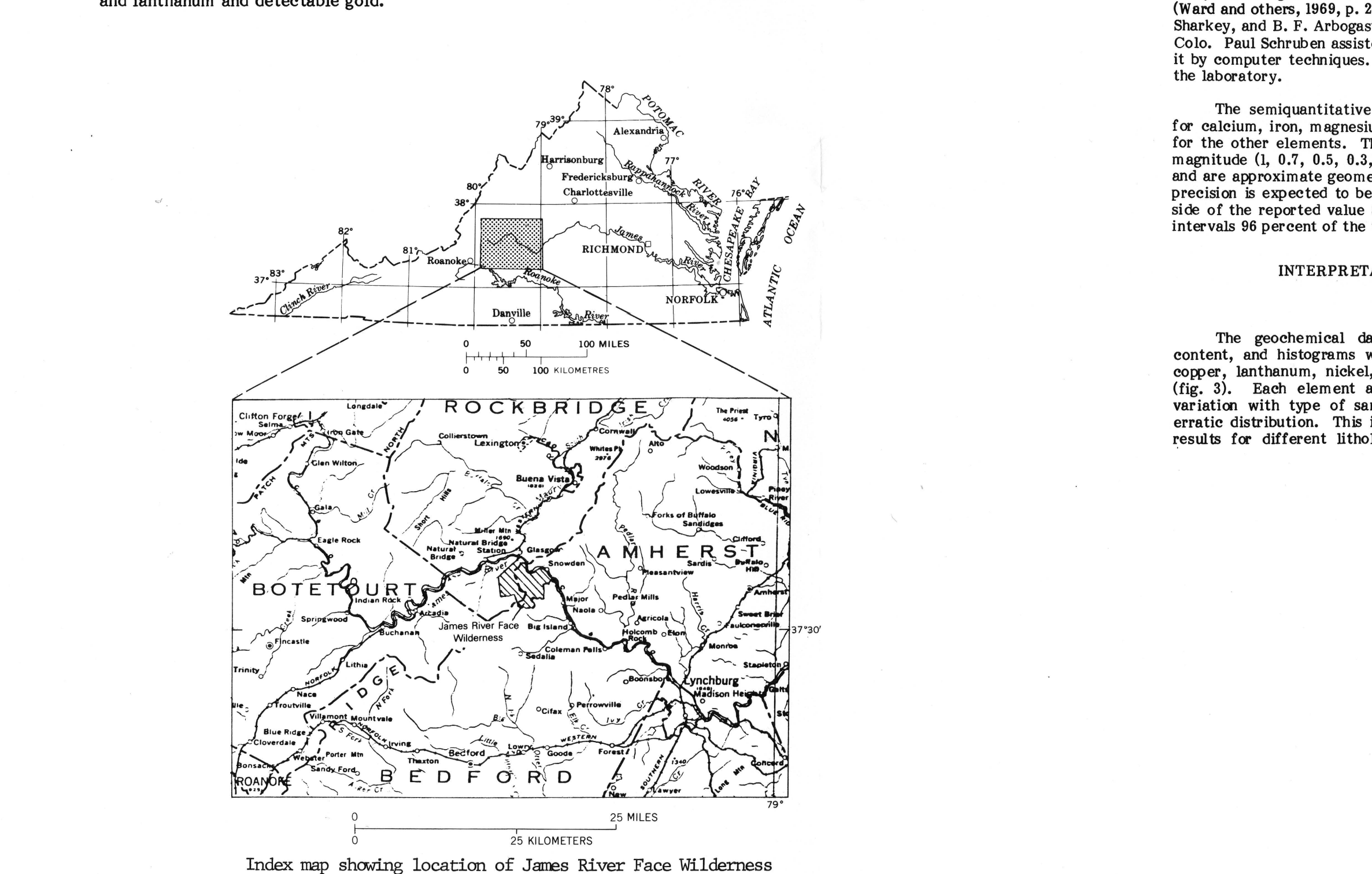


Figure 6.—Localities of drainage basins and stream-sediment samples having highest concentrations of zinc and lanthanum and detectable gold.



Index map showing location of James River Face Wilderness

Table 1.—Geochemical analyses of samples from the James River Face Wilderness

^aAnalyses were by means of semi-quantitative X-ray spectroscopic methods (by Dr D. J. Steens, expert gold and zinc), which are by means of atomic absorption (Na) by A. D. Scharkey and Dr F. H. Grooten; Cu, Ni, Mg, and Ti are reported in percent, and all other spectrographic analyses are reported in parts per million (ppm); as steps over period of magnitude 1; 1.5, 2.5, 5, 7, or multiples of 10 if these numbers) and are approximate geometric midpoints of the concentration ranges. The expected precision is within one adjoining reporting interval on each side of the reported value 83 percent of the time and within two adjoining intervals on each side of the reported value 96 percent of the time (Motokazu and Grimes, 1970). Symbols ND = not detected, <detected below limit of detection, >detected above limit of detection, ? = value whose significance is questionable. See also Figure 1 for symbols used for types of detections. All ppm values are based on dry weight.

^bX and Y coordinates are Universal Transverse Mercator easting and northing coordinates in meters in zone 17.