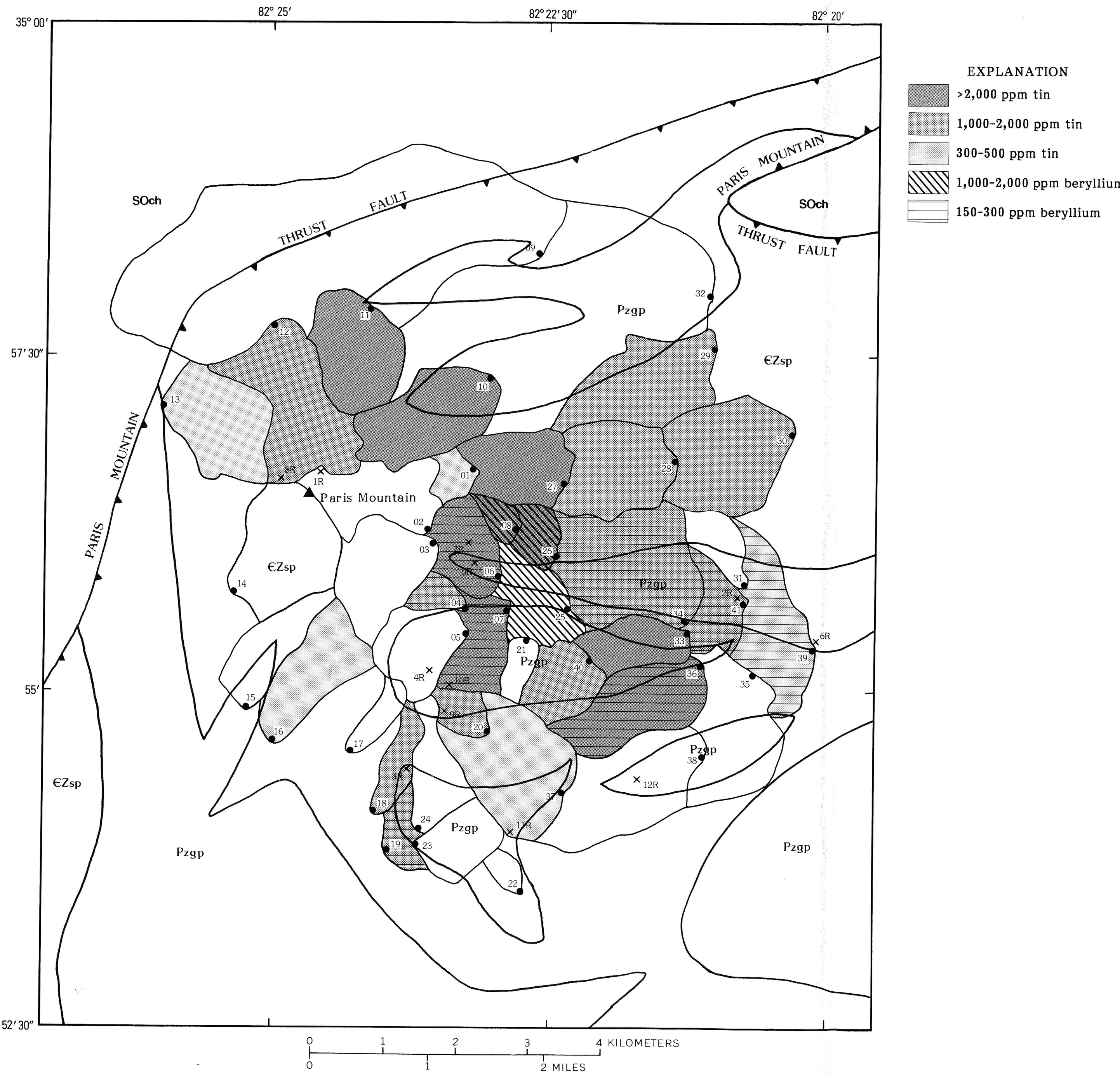

Figure 6.--Distribution of tin and beryllium in heavy-mineral concentrate samples from the Paris Mountain study area. Note that for some drainage basins more than one pattern is shown to indicate the presence of more than one anomalous value. Refer to figure 2 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

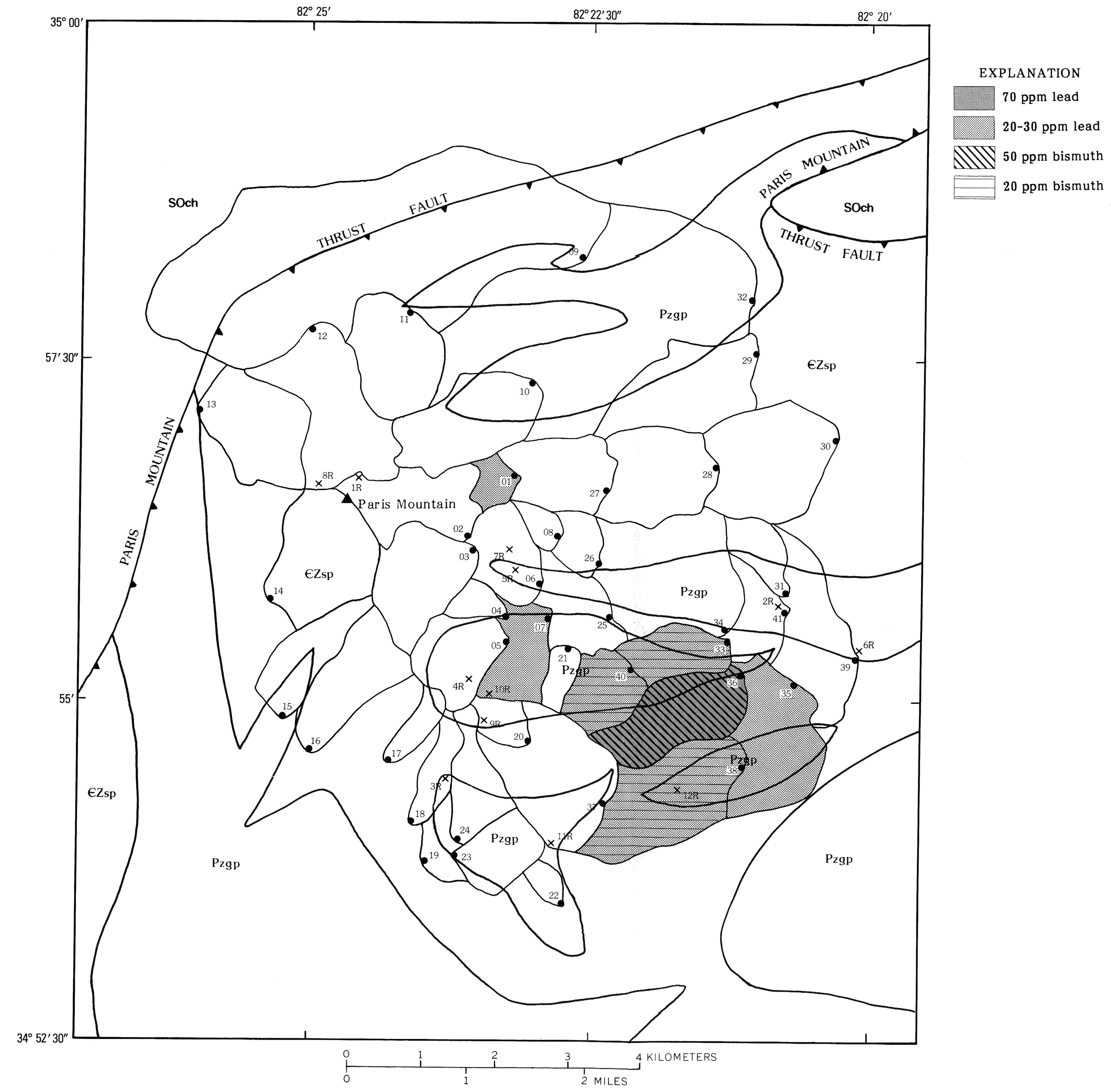

Figure 7.--Distribution of lead and bismuth in heavy-mineral concentrate samples from the Paris Mountain study area. Note that for some drainage basins more than one pattern is shown to indicate the presence of more than one anomalous value. Refer to figure 2 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

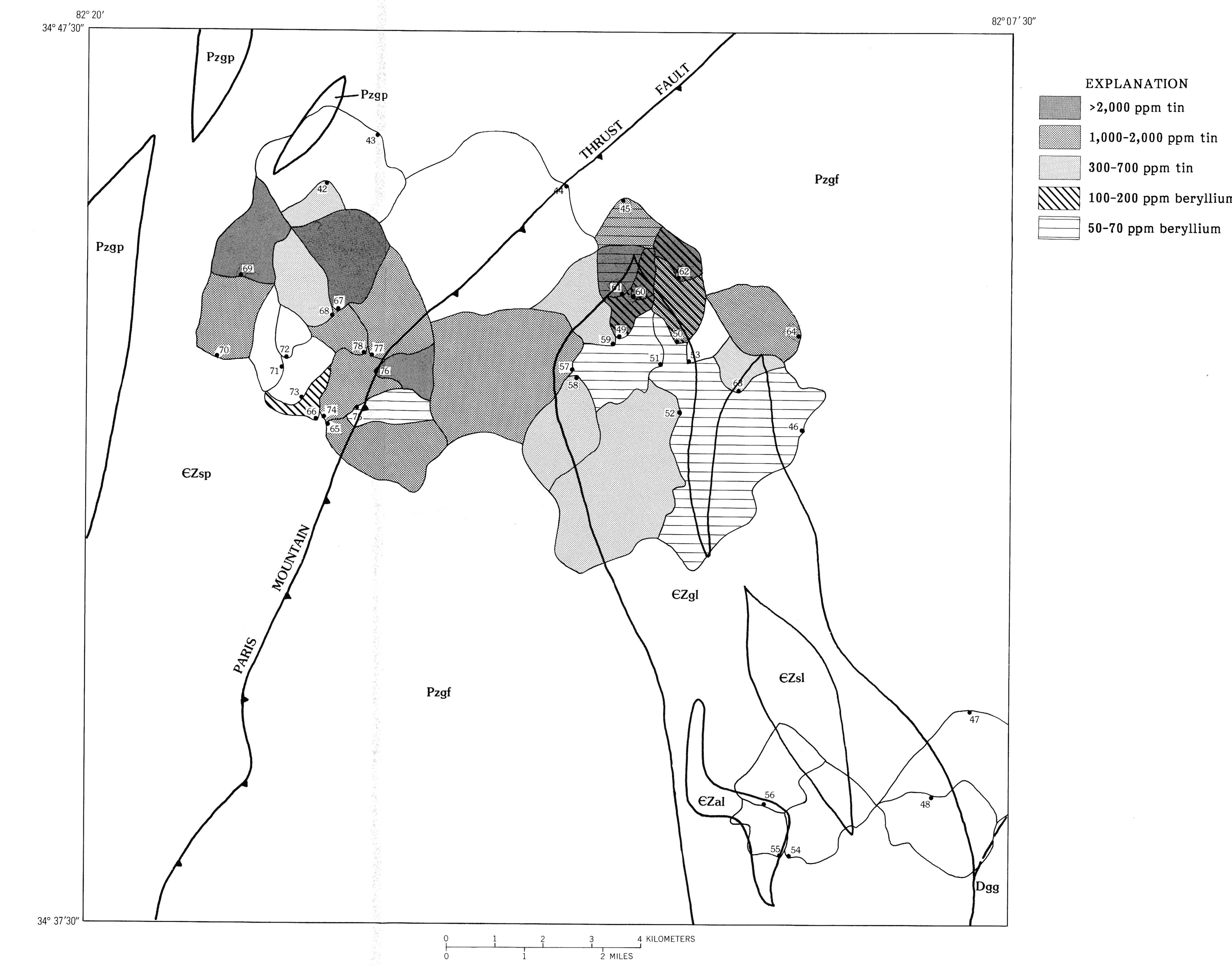

Figure 8.--Distribution of tin and beryllium in heavy-mineral concentrate samples from the Simpsonville study area. Note that for some drainage basins more than one pattern is shown to indicate the presence of more than one anomalous value. Refer to figure 3 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

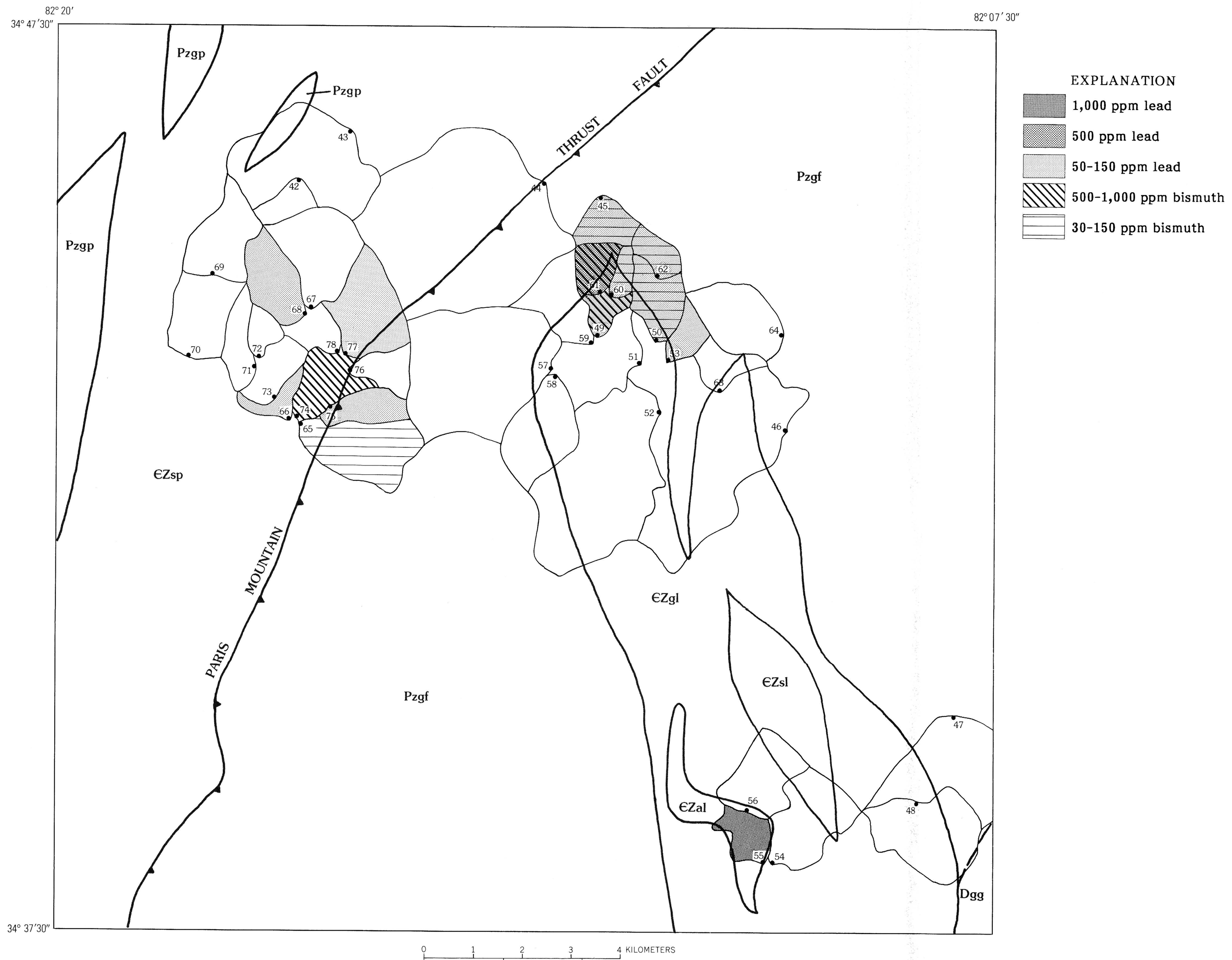

Figure 9.--Distribution of lead and bismuth in heavy-mineral concentrate samples from the Simpsonville study area. Note that for some drainage basins more than one pattern is shown to indicate the presence of more than one anomalous value. Refer to figure 3 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

Figure 10.--Distribution of barium in heavy-mineral concentrate samples from the Simpsonville study area. Refer to figure 3 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

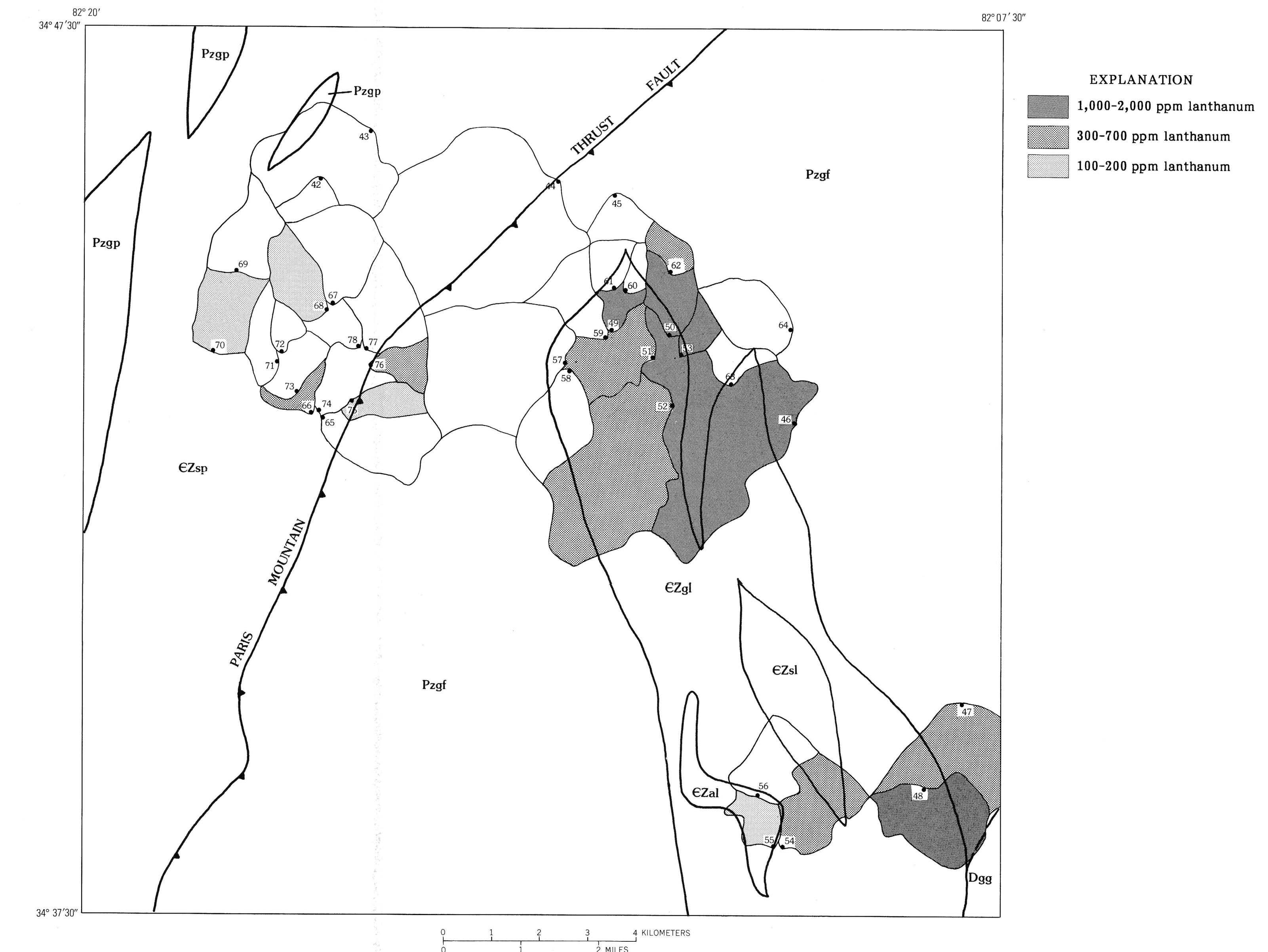

Figure 11.--Distribution of lanthanum in heavy-mineral concentrate samples from the Simpsonville study area. Refer to figure 3 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

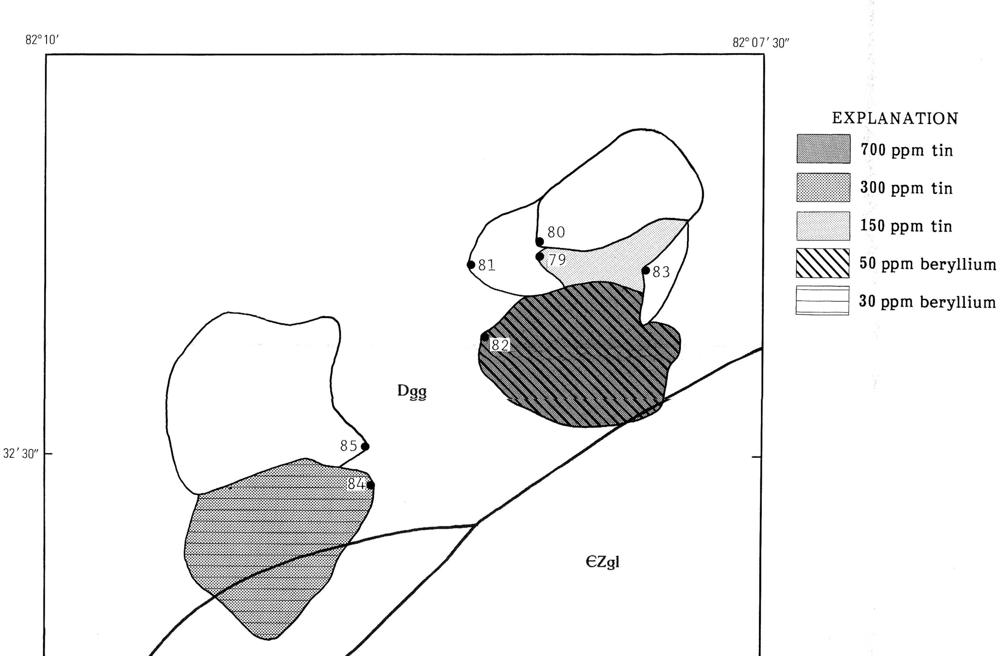

Figure 12.--Distribution of tin and beryllium in heavy-mineral concentrate samples from the Hickory Tavern study area. Note that for some drainage basins more than one pattern is shown to indicate the presence of more than one anomalous value. Refer to figure 4 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

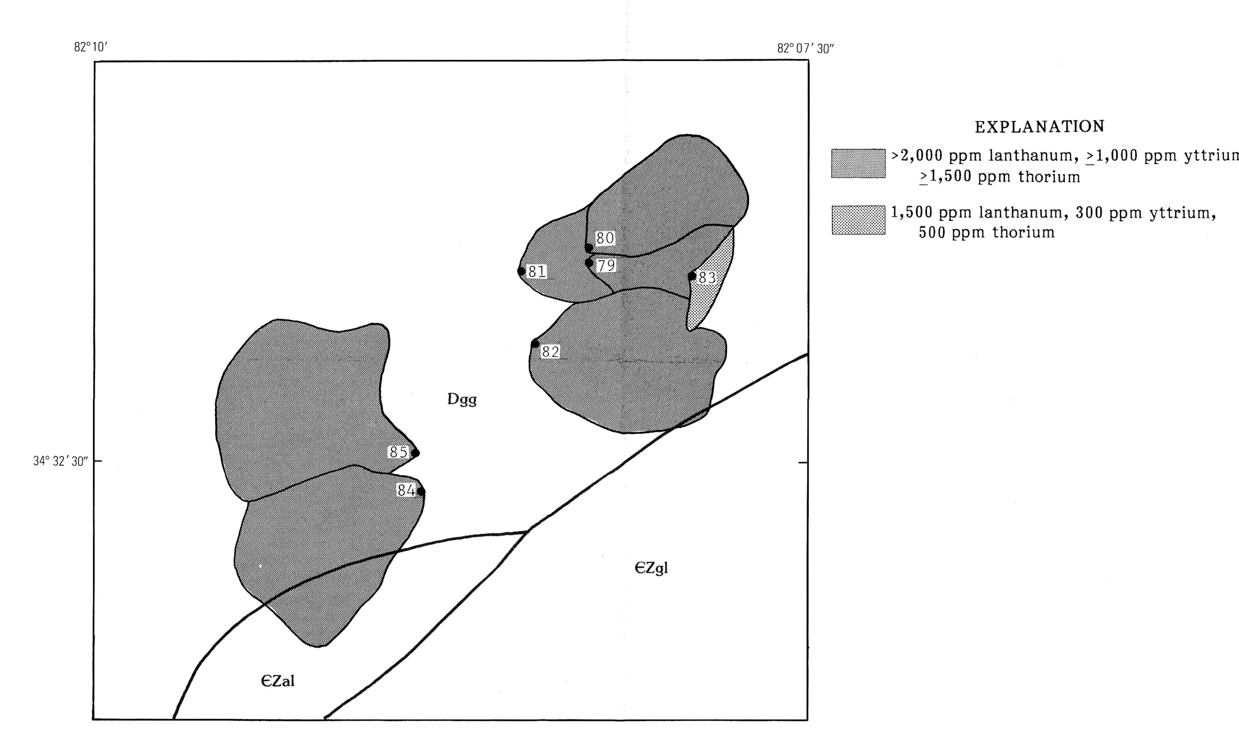

Figure 13.--Distribution of lanthanum, yttrium, and thorium in heavy-mineral concentrate samples from the Hickory Tavern study area. Refer to figure 4 for explanation of geologic map units and symbols. Generalized geology modified from Nelson and others (1987).

Table 1.--*Range and median concentrations for 31 elements in heavy-mineral concentrate samples from the Paris Mountain, Simpsonville, and Hickory Tavern study areas as determined by semiquantitative emission spectrography.* N, *not detected;* L, *detected but less than the value for the first reporting interval. Value in parentheses next to element symbol indicates minimum detection limit. All values are in parts per million except where otherwise noted*

[Analyses done by B.M. Adrian and R.T. Hopkins, U.S. Geological Survey, Denver, Colo.]

Element	Paris Mountain (41 samples)			Simpsonville (37 samples)			Hickory Tavern (7 samples)		
	Low	High	Median	Low	High	Median	Low	High	Median
Ca (0.1%)	N	1.5	L	N	0.7	L	L	2	0.2
Fe (0.1%)	N	.3	0.1	N	.7	L	0.15	.7	.2
Mg (0.05%)	N	L	L	N	.1	L	.05	1.5	.05
Ti (0.005%)	0.15	>2	2	2	>2	>2	>2	>2	>2
Ag (1)	N	7	N	N	N	N	N	N	N
As (500)	N	N	N	N	N	N	N	L	N
Au (20)	N	70	N	N	N	N	N	N	N
B (20)	L	100	70	N	200	50	L	200	50
Ba (50)	N	L	N	N	>10,000	N	N	70	50
Be (2)	N	2,000	70	N	200	10	N	50	L
Bi (20)	N	50	N	N	1,000	N	N	N	N
Cd (50)	N	N	N	N	N	N	N	N	N
Co (10)	N	N	N	N	10	N	N	N	N
Cr (20)	N	200	100	N	200	100	N	100	50
Cu (10)	N	L	N	N	50	N	N	10	L
La (50)	N	500	L	N	2,000	70	1,500	>2,000	>2,000
Mn (20)	N	50	L	N	500	20	50	500	100
Mo (10)	N	N	N	N	N	N	N	10	N
Nb (50)	N	200	L	N	300	100	50	100	100
Ni (10)	N	N	N	N	15	N	L	20	15
Pb (20)	N	70	L	N	1,000	20	10	200	100
Sb (200)	N	N	N	N	N	N	N	N	N
Sc (10)	L	150	30	L	200	70	30	200	150
Sn (20)	N	>2,000	500	30	>2,000	300	30	700	150
Sr (200)	N	N	N	N	700	N	N	L	N
Th (200)	N	N	N	N	300	N	500	>5,000	2,000
V (20)	L	200	100	50	500	150	30	100	70
W (100)	N	300	N	N	N	N	N	200	L
Y (20)	L	700	300	150	1,500	500	300	1,000	1,000
Zn (500)	N	N	N	N	N	N	N	N	N
Zr (20)	700	>2,000	>2,000	>2,000	>2,000	>2,000	>2,000	>2,000	>2,000

Table 2.--*Concentrations in parts per million for 14 trace elements in rock samples from the Paris Mountain study area as determined by energy-dispersive X-ray fluorescence spectroscopy. Value in parentheses below element symbol indicates minimum detection limit.* Leugr, *leucogranite;* brg, *biotite granite gneiss;* bmss, *biotite-muscovite-sillimanite schist;* peg, *pegmatite*

Sample no.	Rock type	Sn (2)	Ba (15)	La (10)	Ce (20)	Rb (2)	Sr (5)	Y (5)	Nb (5)	Zr (10)	Mo (10)	Ni (5)	Cu (5)	Zn (18)	Cr (20)
1R	leugr	2	1,171	34	79	103	334	17	<5	101	<10	<5	<5	29	<20
2R	leugr	2	345	39	74	159	86	8	6	93	<10	<5	<5	59	<20
3R	brg	4	1,452	120	193	145	733	22	12	162	<10	<5	<5	45	<20
4R	brg	5	577	98	163	170	408	16	11	310	<10	11	7	110	65
5R	brg	35	620	99	165	215	448	22	18	219	<10	<5	<5	54	<20
6R	brg	4	1,930	137	209	155	1,400	10	9	356	<10	16	61	103	51
7R	bmss	6	604	94	157	140	40	35	27	193	<10	57	94	127	168
8R	bmss	5	400	62	110	166	<5	38	22	205	<10	27	21	145	147
9R	peg	7	39	32	25	287	18	8	<5	26	<10	<5	<5	23	<20
10R	peg	5	859	<10	<20	358	334	11	<5	17	<10	<5	<5	21	<20
11R	peg	2	37	<10	21	134	20	11	5	26	<10	<5	<5	27	<20
12R	peg	7	65	12	24	209	36	7	15	10	<10	<5	<5	40	<20

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By
John C. Jackson

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