

Fig. 2-1-51 (1) Geochemical Anomaly Map in the Camarones Area (Au)

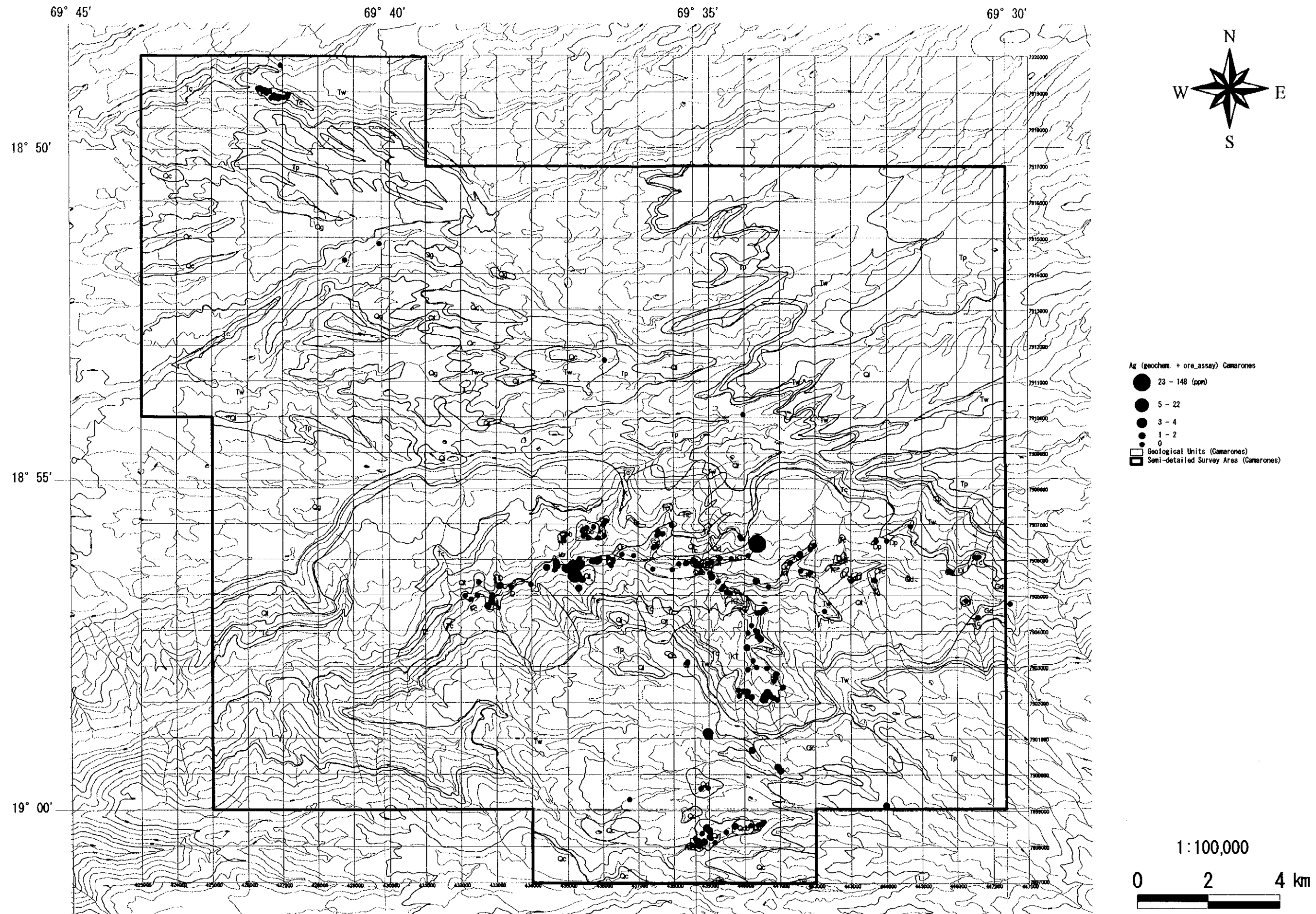


Fig. 2-1-51 (2) Geochemical Anomaly Map in the Camarones Area (Ag)

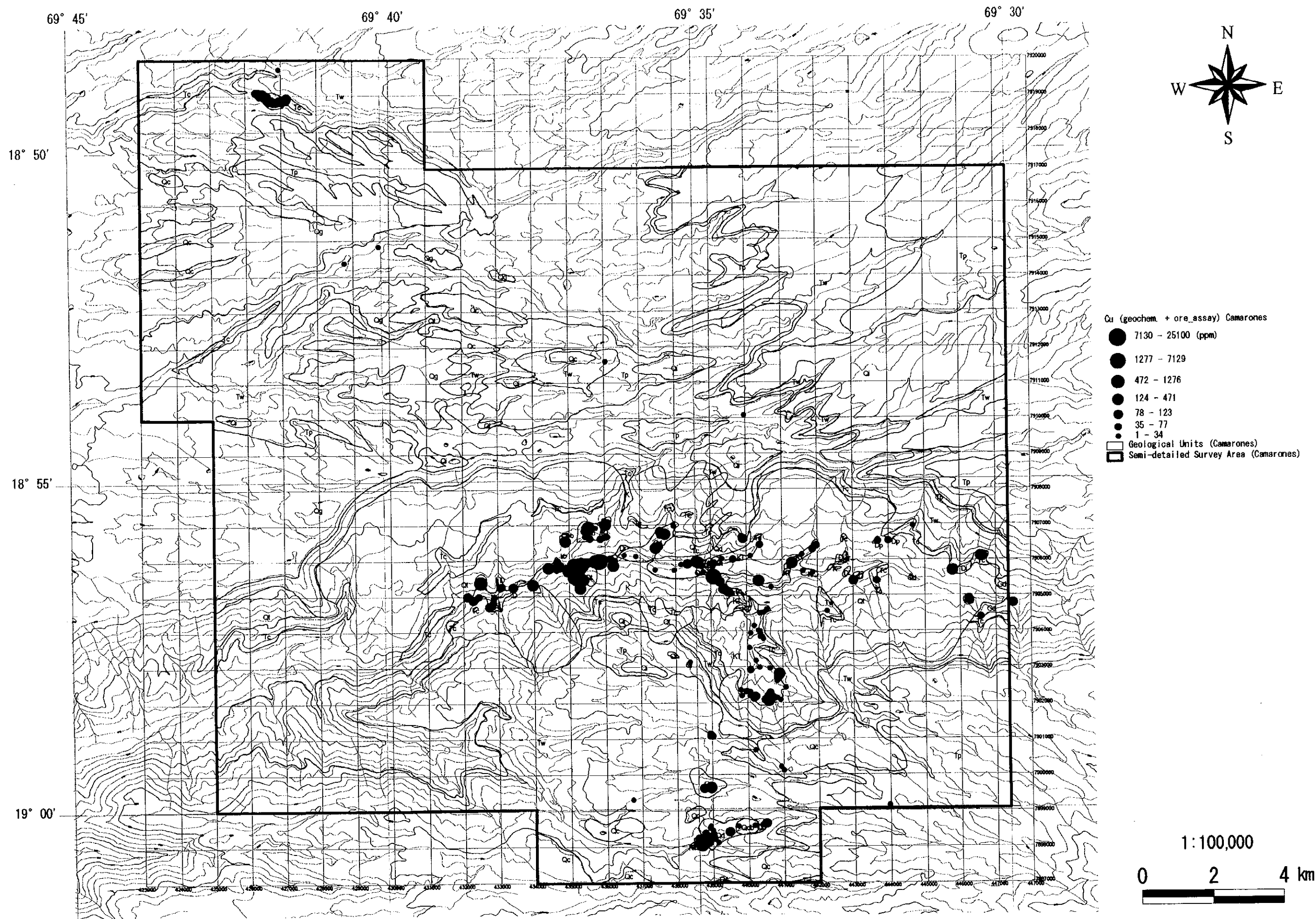


Fig. 2-1-51 (3) Geochemical Anomaly Map in the Camarones Area (Cu)

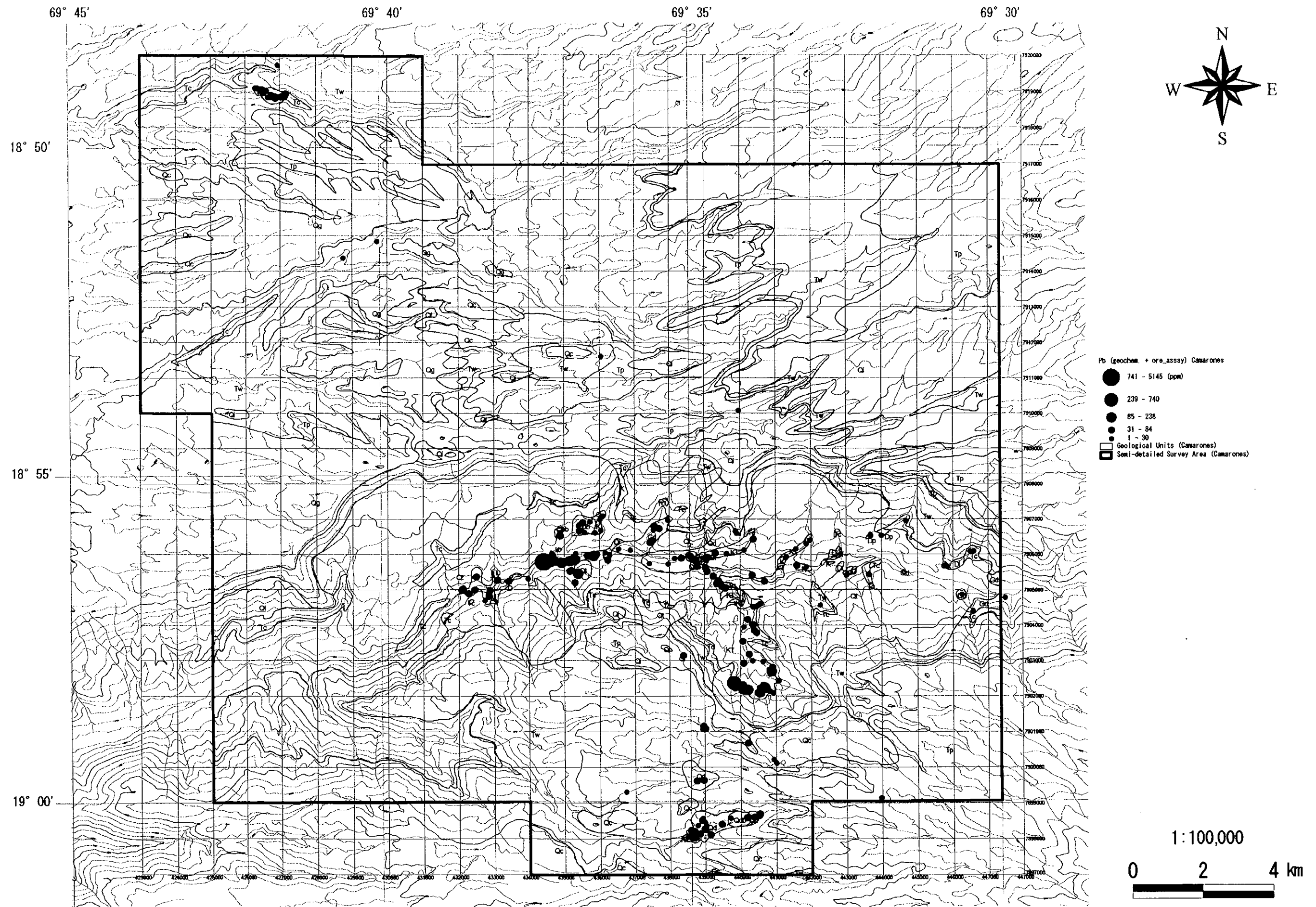


Fig. 2-1-51 (4) Geochemical Anomaly Map in the Camarones Area (Pb)

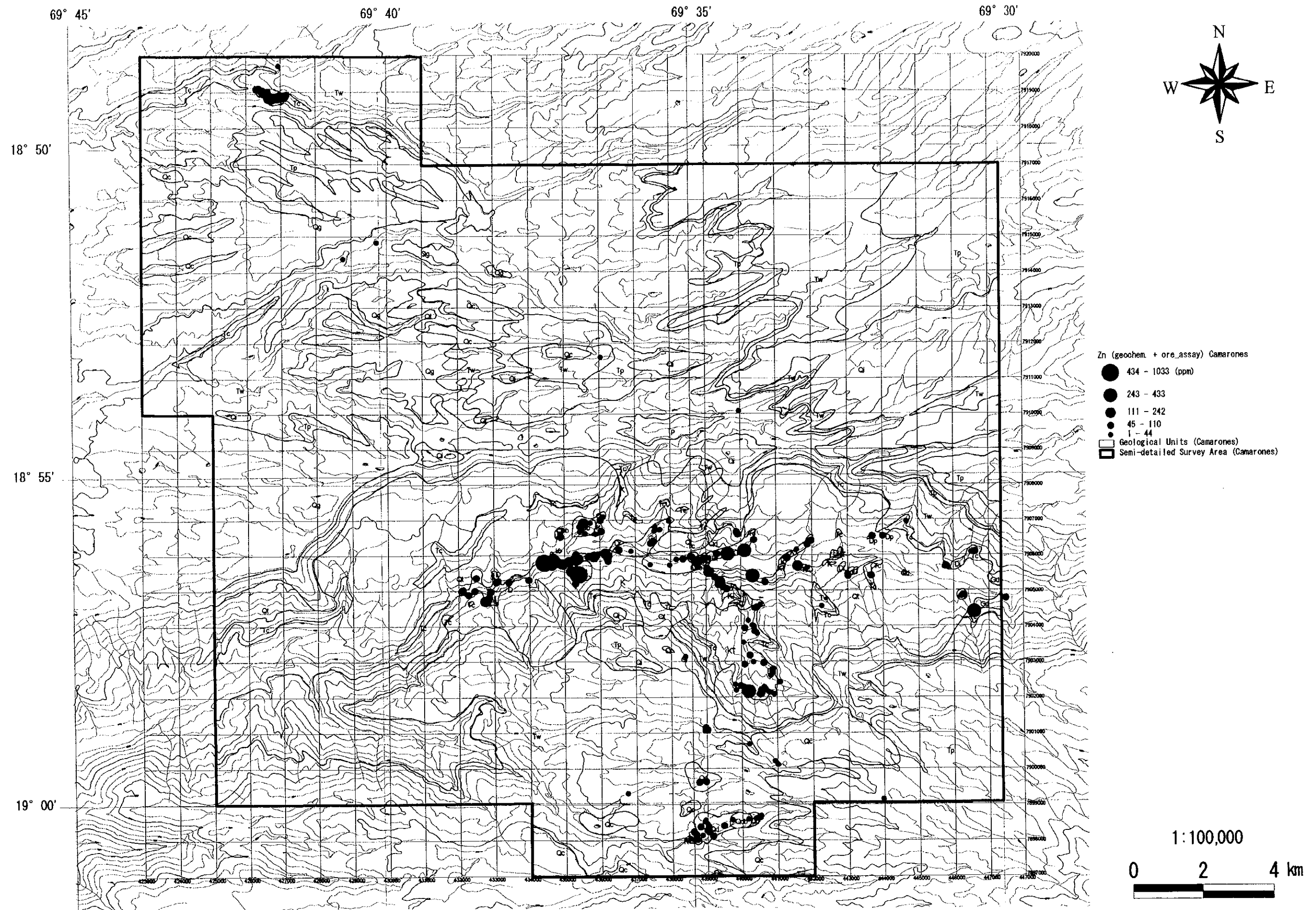


Fig. 2-1-51 (5) Geochemical Anomaly Map in the Camarones Area (Zn)

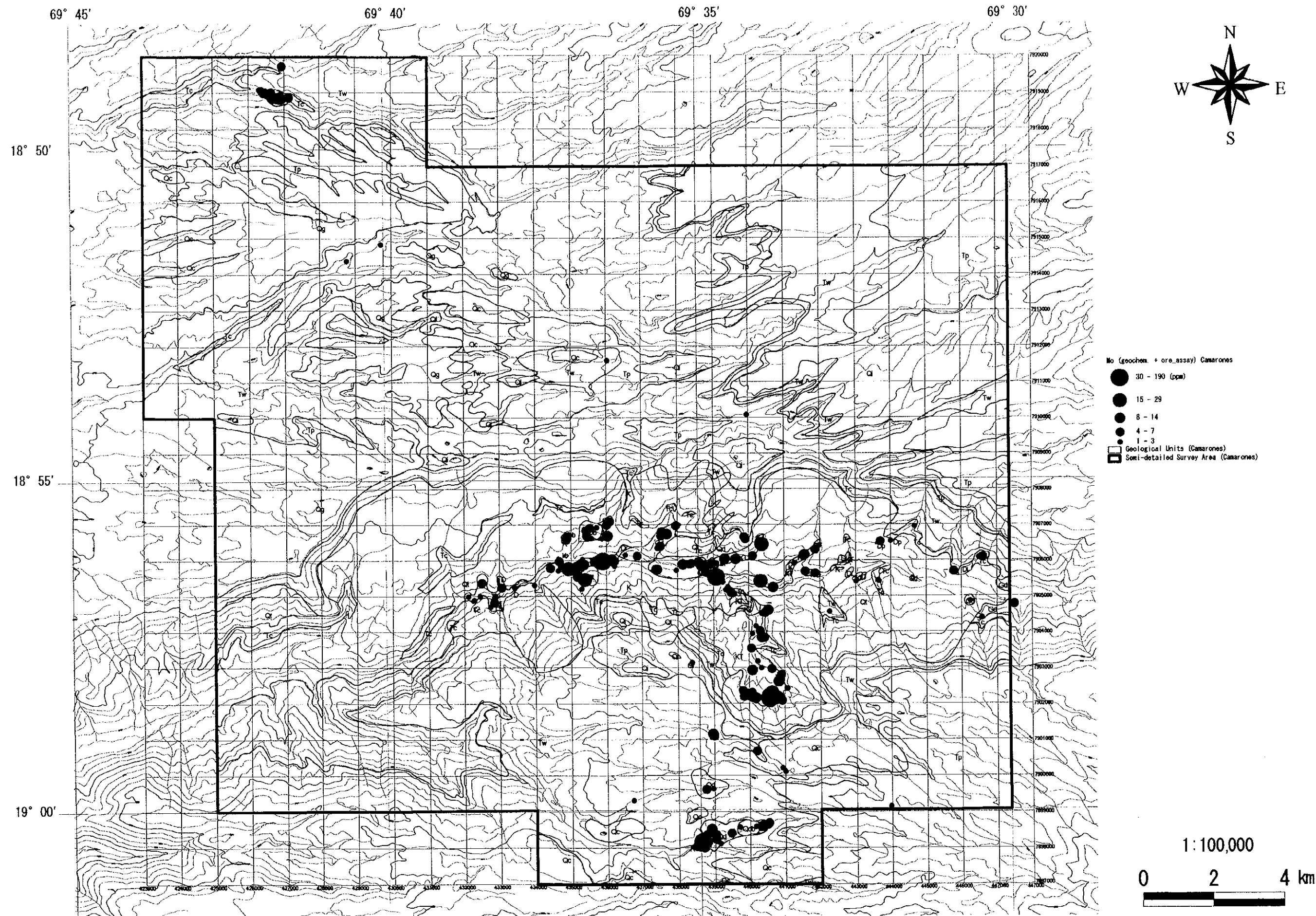


Fig. 2-1-51 (6) Geochemical Anomaly Map in the Camarones Area (Mo)

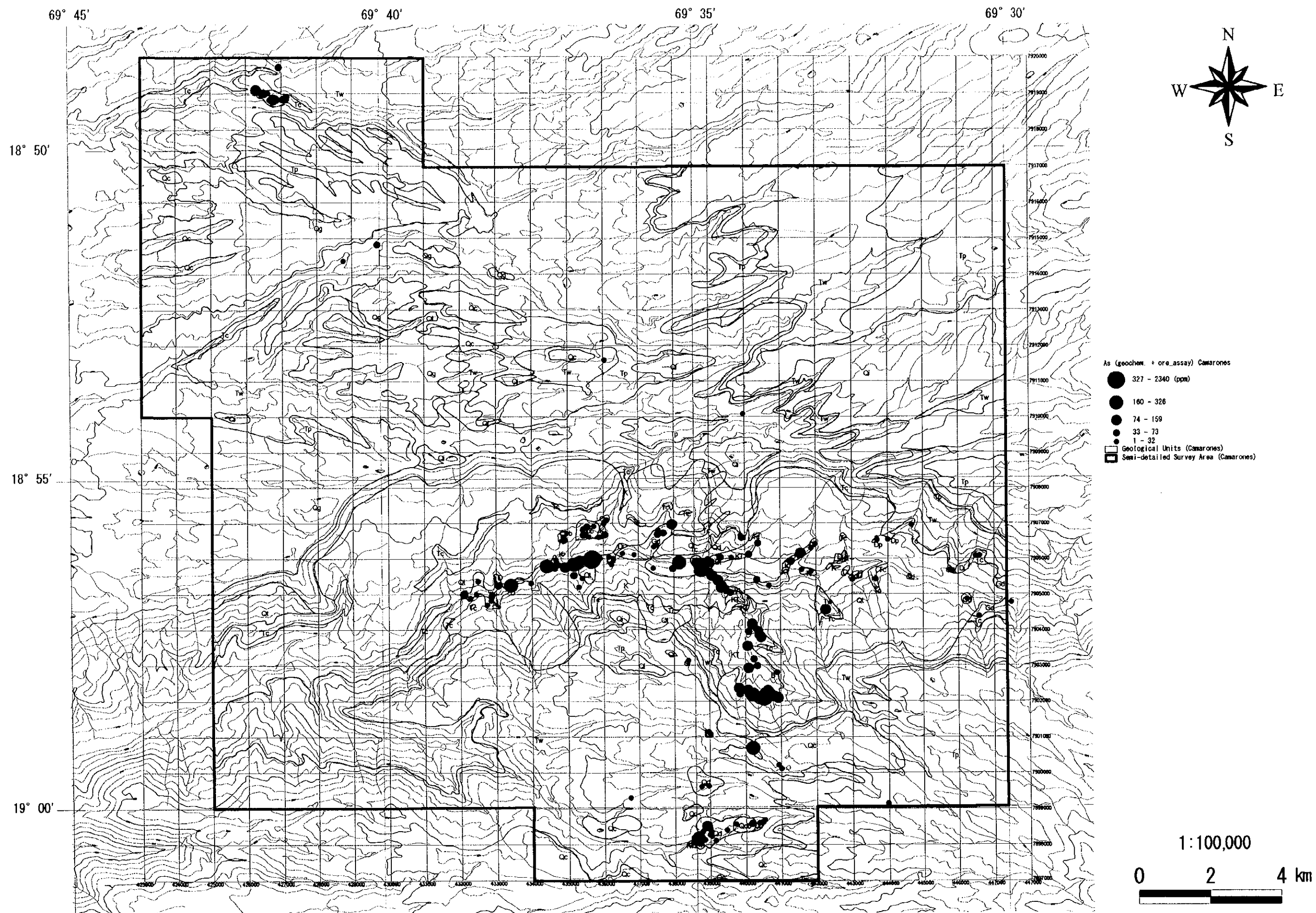


Fig. 2-1-51 (7) Geochemical Anomaly Map in the Camarones Area (As)

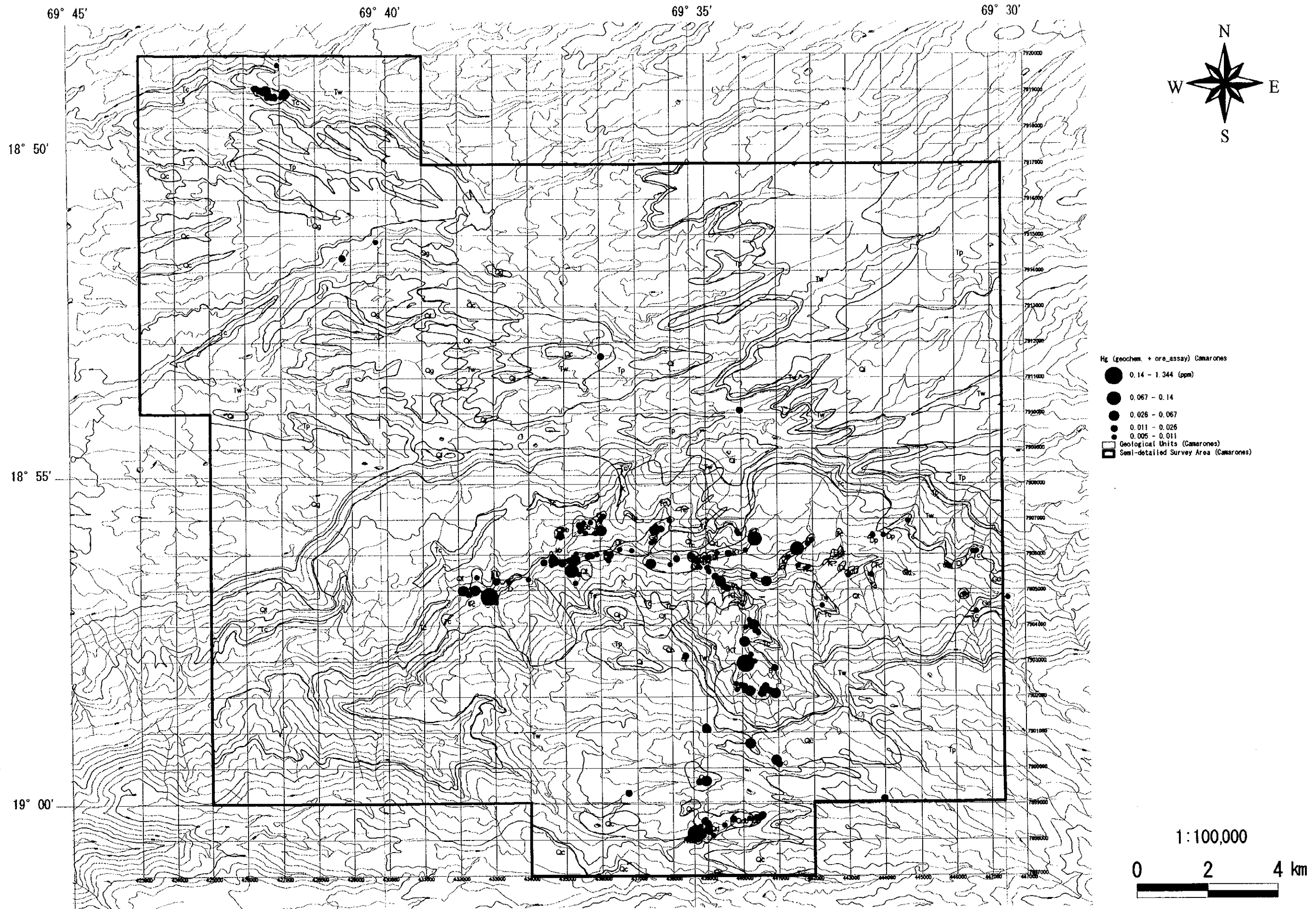


Fig. 2-1-51 (8) Geochemical Anomaly Map in the Camarones Area (Hg)





Table 2-1-2 Basic Static Value of Rock Samples in the Camarones Area

<i>Granodiorite (Gd)</i>	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Average	68	24	81	5	18	10	0.010	3	0.1
Median	82	21	50	5	14	10	0.005	3	0.1
Standard deviation	49	15	120	3	10	0	0.014	0	0.1
Minimum	7	6	1	1	7	10	0.005	3	0.1
Maximum	141	52	433	9	34	10	0.053	3	0.2
Number of sample	11	11	11	11	11	11	11	11	11

<i>Diorite porphyry (Dp)</i>	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Average	117	22	47	5	32	10	0.007	3	0.3
Median	45	23	53	5	11	10	0.005	3	0.4
Standard deviation	166	17	20	2	40	0	0.005	0	0.3
Minimum	18	4	23	3	3	10	0.005	3	0.1
Maximum	471	45	72	8	96	10	0.017	3	0.7
Number of sample	7	7	7	7	6	6	6	7	7

<i>Diorite (Di)</i>	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Average	42	20	72	4	28	10	0.005	6	0.2
Median	46	20	83	3	20	10	0.005	6	0.3
Standard deviation	18	19	39	4	22	0	0.000	3	0.1
Minimum	18	1	16	1	12	10	0.005	3	0.1
Maximum	60	37	106	9	61	10	0.005	9	0.3
Number of sample	4	4	4	4	4	4	4	4	4

<i>Quartz porphyry (Qp)</i>	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Average	683	26	28	4	28	10	0.007	6	0.5
Median	182	27	19	4	13	10	0.005	3	0.3
Standard deviation	1300	12	24	3	36	0	0.004	5	0.6
Minimum	7	5	3	1	3	10	0.005	3	0.1
Maximum	4963	57	108	14	122	10	0.015	20	3.5
Number of sample	36	36	36	36	23	23	23	36	36

<i>Quartz diorite (Qd)</i>	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Average	63	29	57	5	32	10	0.013	5	0.3
Median	52	29	52	4	22	10	0.005	3	0.2
Standard deviation	68	16	43	2	40	0	0.012	6	0.6
Minimum	6	1	7	1	5	10	0.005	3	0.1
Maximum	448	69	242	10	199	10	0.049	32	3.8
Number of sample	52	52	52	52	45	45	45	52	52

<i>F. Lupica (KT)</i>	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Average	24	50	41	7	76	11	0.047	46	3.4
Median	18	31	19	5	66	10	0.005	3	0.1
Standard deviation	19	106	80	5	54	4	0.206	259	21.6
Minimum	6	5	1	1	8	10	0.005	3	0.1
Maximum	92	740	412	20	229	30	1.344	1782	148.0
Number of sample	47	47	47	47	42	42	42	47	47

<i>F. Empexa (K)</i>	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Average	377	120	104	11	111	11	0.013	12	0.4
Median	87	38	79	3	30	10	0.005	4	0.2
Standard deviation	1093	629	97	35	352	3	0.012	26	0.5
Minimum	7	1	18	1	2	10	0.005	3	0.1
Maximum	7129	5145	746	190	2340	28	0.050	170	2.2
Number of sample	66	66	66	66	55	55	55	66	66

Table 2-1-3 Geochemical Correlation Coefficients of Rock Samples in the Camarones Area

	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Au (ppb)	Ag (ppm)
Cu (ppm)	1								
Pb (ppm)	0.015	1							
Zn (ppm)	0.066	<b>0.524</b>	1						
Mo (ppm)	0.239	-0.001	0.043	1					
As (ppm)	-0.017	0.058	-0.015	0.080	1				
Sb (ppm)	-0.012	0.313	0.127	0.016	<b>0.379</b>	1			
Hg (ppm)	0.024	0.004	-0.012	0.221	0.046	<b>0.449</b>	1		
Au (ppb)	-0.006	0.006	0.018	0.058	0.001	0.330	0.081	1	
Ag (ppm)	0.138	0.008	-0.010	0.060	-0.003	0.314	0.059	<b>0.979</b>	1

	Log Cu (ppm)	Log Pb (ppm)	Log Zn (ppm)	Log Mo (ppm)	Log As (ppm)	Log Sb (ppm)	Log Hg (ppm)	Log Au (ppb)	Log Ag (ppm)
Log Cu (ppm)	1								
Log Pb (ppm)	0.274	1							
Log Zn (ppm)	<b>0.301</b>	0.141	1						
Log Mo (ppm)	0.168	0.217	-0.102	1					
Log As (ppm)	-0.004	<b>0.358</b>	-0.083	<b>0.300</b>	1				
Log Sb (ppm)	-0.025	0.171	0.040	0.102	0.239	1			
Log Hg (ppm)	0.011	0.129	-0.005	0.192	0.112	0.272	1		
Log Au (ppb)	0.220	0.172	0.217	0.184	0.094	0.306	0.254	1	
Log Ag (ppm)	0.302	0.197	0.012	0.156	0.041	0.228	0.229	<b>0.366</b>	1

Table 2-1-4 Results of Principal Component Analysis

Eigenvectors						
	1	2	3	4	5	6
Log Cu (ppm)	0.3049	-0.5079	-0.2886	0.2515	-0.0141	-0.0492
Log Pb (ppm)	<b>0.3024</b>	0.0138	-0.4229	-0.2149	0.2557	-0.4995
Log Zn (ppm)	0.1582	-0.5871	-0.1026	-0.4568	-0.3315	0.0950
Log Mo (ppm)	0.3294	0.2954	-0.3078	<b>0.4147</b>	-0.3979	<b>0.3001</b>
Log As (ppm)	0.2973	<b>0.4371</b>	-0.4052	-0.2538	0.0638	0.1305
Log Sb (ppm)	0.3392	0.2068	<b>0.3014</b>	-0.4827	0.2509	0.1782
Log Hg (ppm)	0.3139	0.1891	<b>0.4023</b>	0.0306	-0.5949	-0.5633
Log Au (ppb)	<b>0.4192</b>	-0.1570	0.3142	-0.0167	-0.0433	<b>0.4715</b>
Log Ag (ppm)	<b>0.3007</b>	-0.1254	0.2763	<b>0.4506</b>	<b>0.4024</b>	-0.1286

Eigenvalue and its contribution						
	1	2	3	4	5	6
Eigenvalue	2.388	1.488	1.197	0.942	0.772	0.719
Contribution (%)	26.532	16.533	13.302	10.469	8.579	7.992
Cumulative contr. (%)	26.532	43.064	56.366	66.835	75.414	83.407



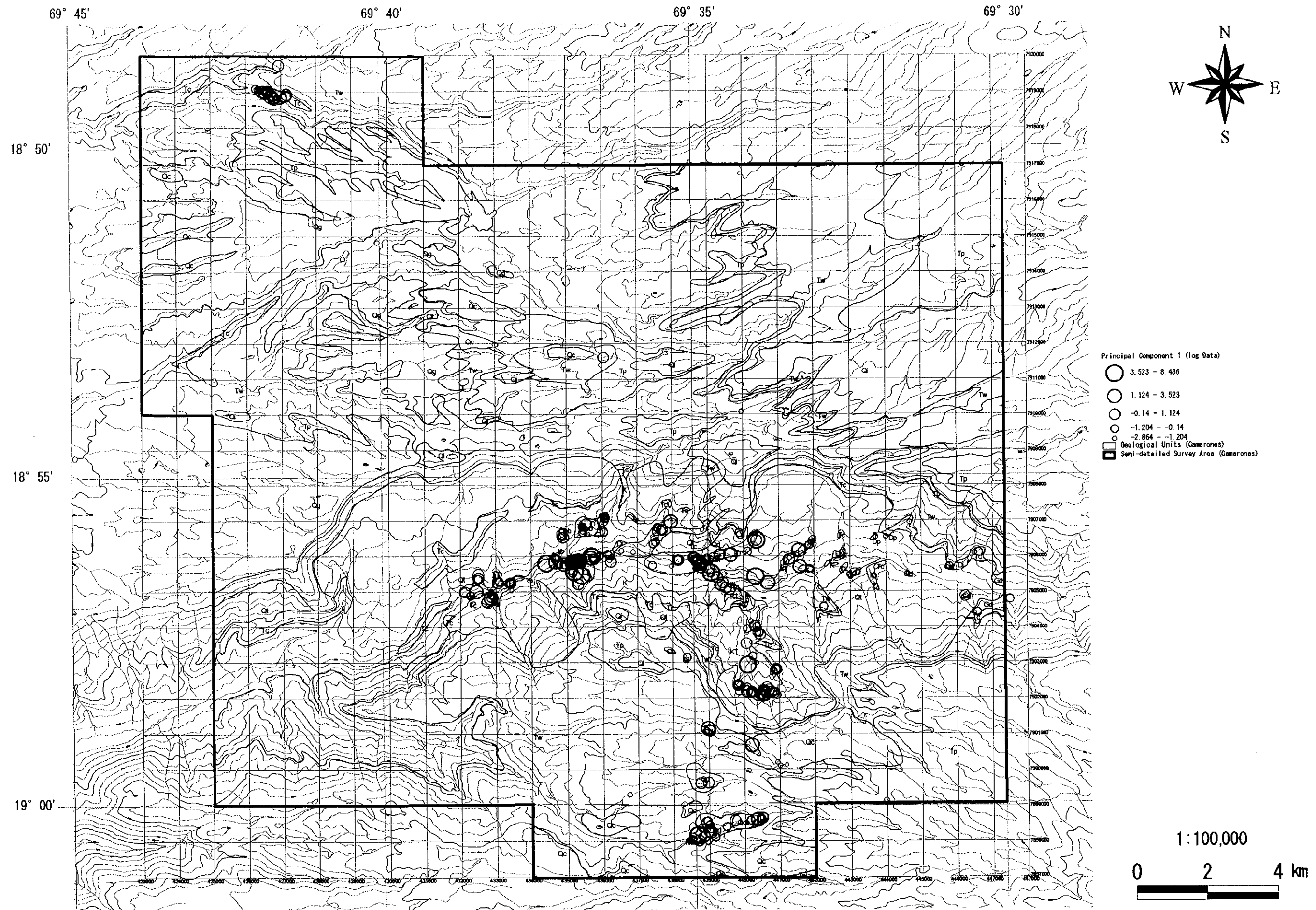


Fig. 2-1-52 (1) Scores of Principal Component Analysis in the Camarones Area (1st Comp.)

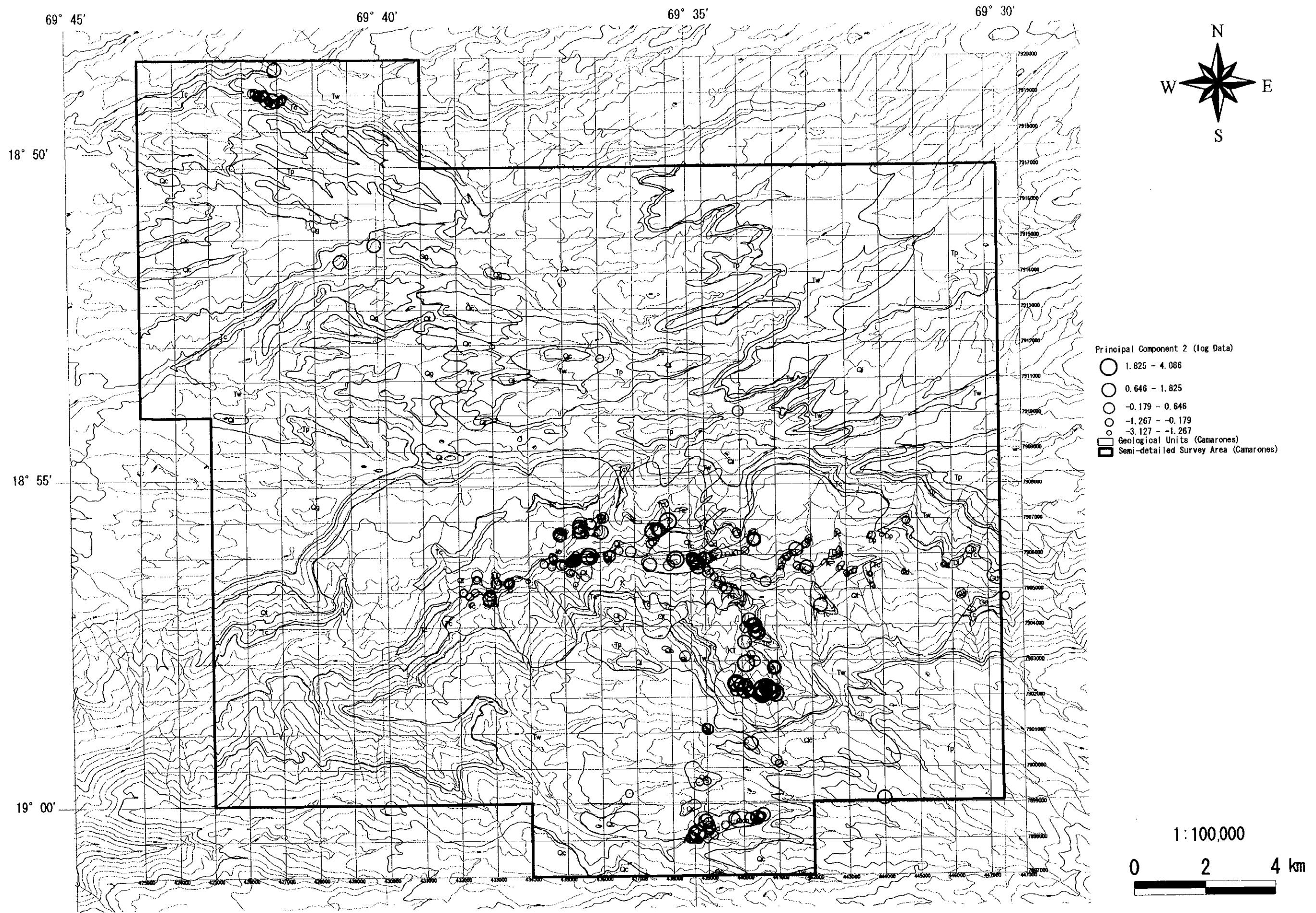


Fig. 2-1-52 (2) Scores of Principal Component Analysis in the Camarones Area (2nd Comp.)

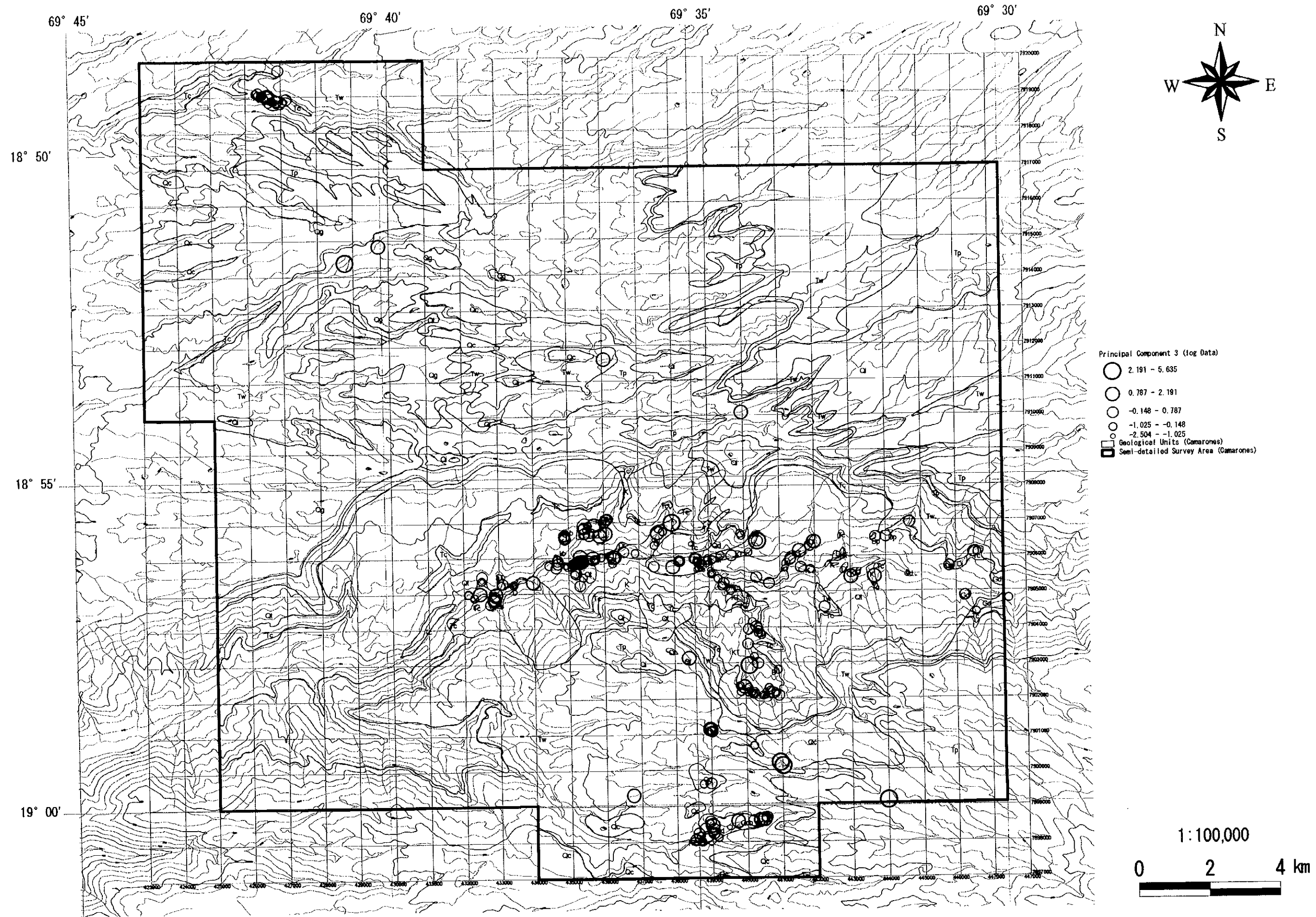


Fig. 2-1-52 (3) Scores of Principal Component Analysis in the Camarones Area (3rd Comp.)

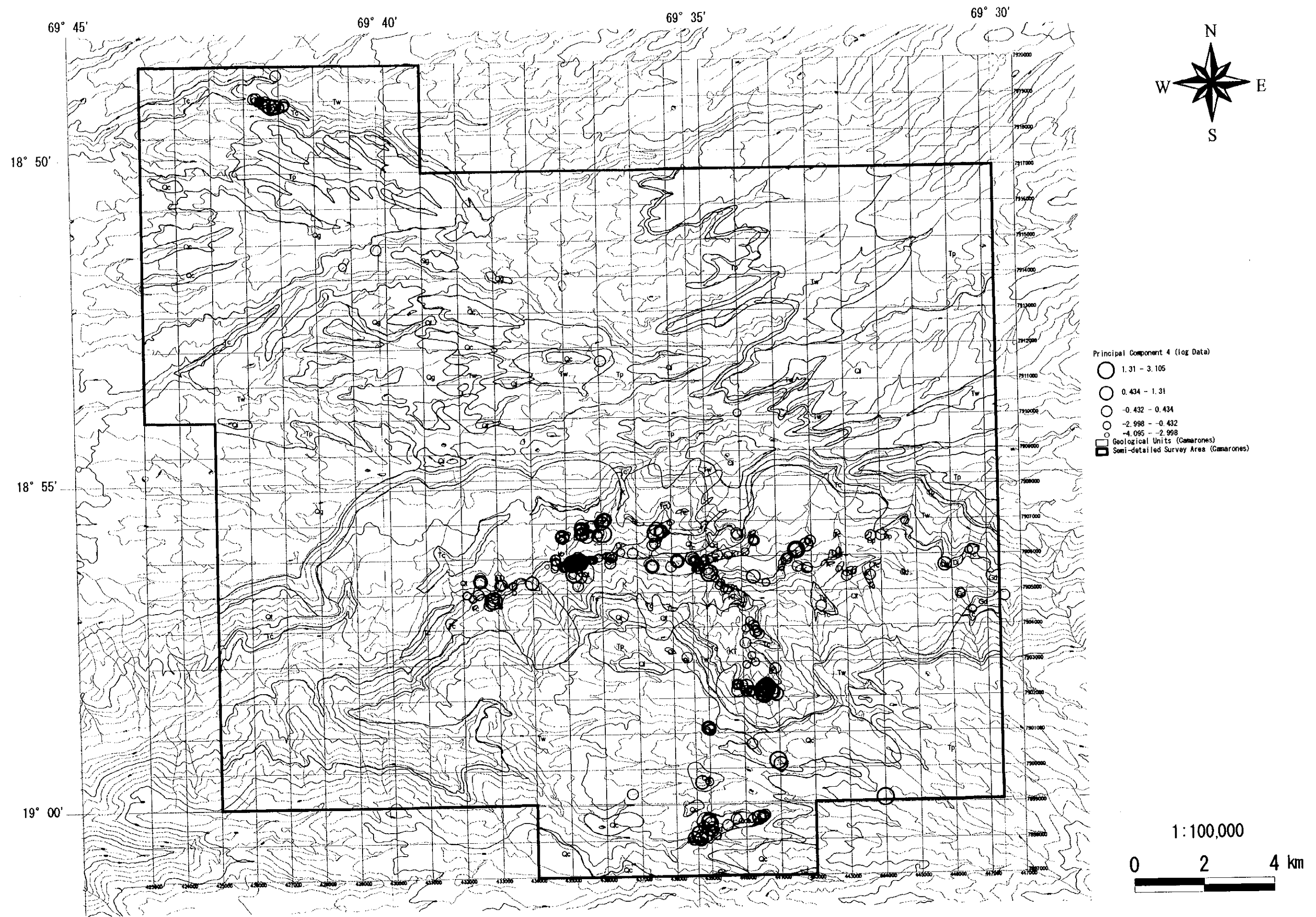


Fig. 2-1-52 (4) Scores of Principal Component Analysis in the Camarones Area (4th Comp.)



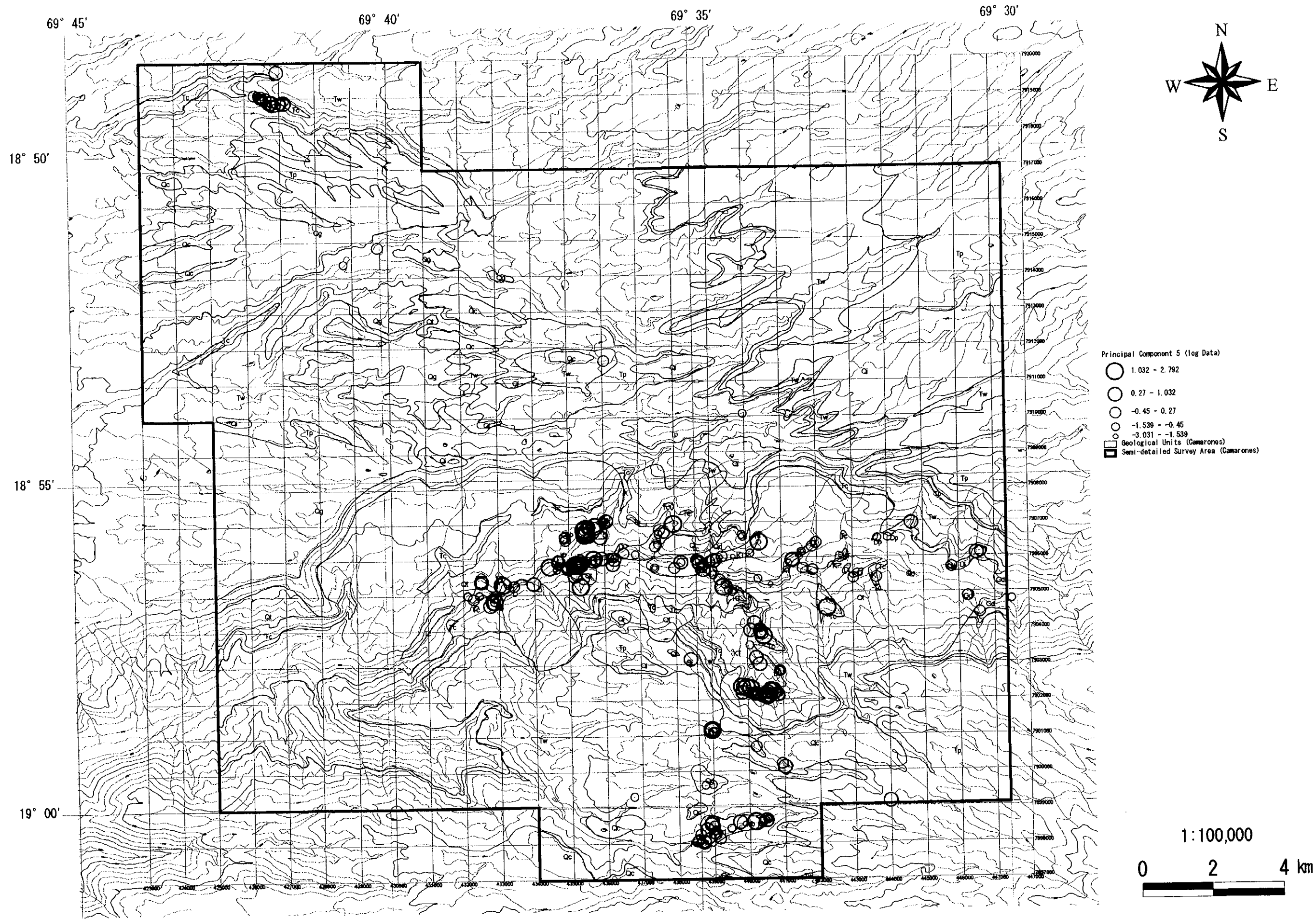


Fig. 2-1-52 (5) Scores of Principal Component Analysis in the Camarones Area (5th Comp.)

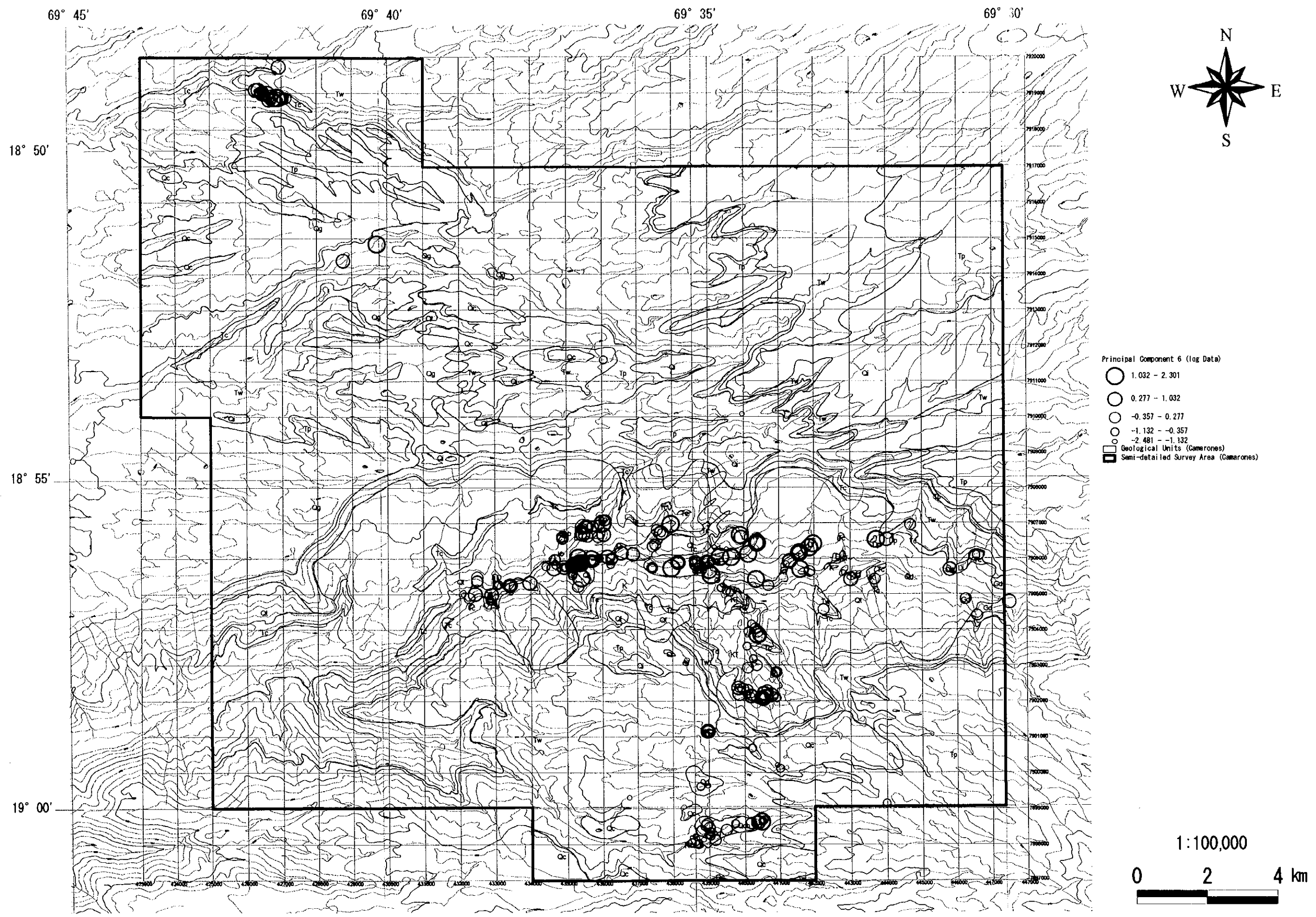


Fig. 2-1-52 (6) Scores of Principal Component Analysis in the Camarones Area (6th Comp.)



Principal component analysis results are shown in Table 2-1-4. Principal component analysis scores are laid out in Figure 2-1-52. Correlation matrix obtained from the logarithmic values of the geochemical analytical results was used for the calculation of the principal component calculation.

Regarding the first principal component, eigenvectors of Au, Ag, Pb are high, and high principal component score areas agree with nearly all mineral showing zones with the exception of those in Miocene Series. Therefore this component is considered to represent the porphyry copper mineralization and the following epithermal activity.

Regarding the second principal component, eigenvector of As is high, and the high principal component score area nearly agree with all mineral showing zones including those in Miocene Series. Therefore this component is considered to represent the porphyry copper mineralization and the following epithermal activity, and the epithermal mineralization during Miocene and later.

Regarding the third principal component, eigenvectors of Hg and Sb are high, and high principal component score areas occurs widely in the periphery to the vicinity of mineralized zones of Camarones and also agree with the mineral showings in the post-Miocene formations. Therefore the relation of this component to porphyry copper mineralization is considered to be low and to represent the epithermal type mineralization after porphyry copper activity.

Regarding the fourth principal component, eigenvectors of Ag and Mo are high, and many high principal component score areas agree with the distribution of quartz porphyry, quartz diorite and diorite porphyry bodies. Therefore this component is considered to represent the porphyry copper mineralization.

Regarding the fifth principal component, eigenvector of Ag is high, and many high principal component score areas agree with the distribution of quartz porphyry and the quartz veins of the Camarones zones. Therefore this component is considered to represent the porphyry copper mineralization and the following epithermal activity.

Regarding the sixth principal component, eigenvectors of Au and Mo are high, and many high principal component score areas agree with the distribution of granitic bodies and the

copper mineral showings of the Camarones zones. Therefore this component is considered to represent the porphyry copper mineralization.