The S. Imbak Sub-area South dose not show a clear zoning of alteration minerals. Only few samples show So/Mo and many samples include both chlorite and more than trace amount of sericite. In the mineralization zone SA, unlike the mineralization zone NA of the North, the samples with abundant sericite was not found. Instead of it, the samples in the zone show abundant quartz with trace amount of sericite. The occurrences of biotite in and around the mineralization zones SB and SC probably suggest the appearance of biotite through thermal metamorphism by the intrusion of diorite porphyry.

The alteration zoning of the typical porphyry copper mineralization are, from center to margin, potassic (k-feldspar, biotite, sericite), phyllic (sericite, quartz, pyrite), argillic (kaolinite, montmorillonite) and propylitic (chlorite, epidote, calcite) zones. Comparing the alteration of the S. Imbak Sub-area to this, the west part of the mineralization zone NA belong to phyllic zone characterized by abundant sericite with disappearance of chlorite. The phyllic zone is surrounded by propylitic zone characterized by chlorite and argillic zone characterized by Se/Mo in the S. Imbak Sub-area North. In the S. Imbak Sub-area South, widespread occurrence of abundant sericite with chlorite samples suggest that the area belongs to the transitional zone between propylitic zone and phyllic zone. The occurrences of samples with abundant quartz in the center of mineralization zone SA and samples with abundant sericite in the mineralization zone SB suggests that alteration of the these zones are slightly higher than surrounding area and close to phyllic zone. As shown in Fig. II-2-8, filling temperature of fluid inclusion is the highest in the mineralization zone NA and slightly lower in the mineralization zone SA and SB. The temperature of the phyllic zone of the typical porphyry copper type mineralization is known to be 300° C to 400° C. The filling temperatures of mineralization zone NA, SA and NB fall in this temperature range.

2-3 Discussion

The main mineralization and alteration in the S. Imbak Sub-area South occur in the silicification/pyrite dissemination zone of central north part (SA), center part (SB) and east part (SC). The occurrences of many intrusive bodies of the diorite porphyry in the mineralization zones suggest the mineralization and alteration in the S. Imbak Sub-area South are closely related to the diorite porphyry. Geological information and geochemical survey suggest mineralization zone NA is the south extension of the mineralization zone NA of the S. Imbak Sub-area North. It is characterized by the quartz-sulfides veins in the silicification/pyrite dissemination zone. The most prominent veins were observed in the mineral showing IMS-1 where Ag and Cu rich veins with maximum width of 35 cm occur. Other than this, Type ② vein with Ag occur in the mineralization zone SA. The mineral showing IMS-2 of the mineralization zone SB shows the mineralization similar to that of porphyry copper type with dissemination of pyrite and chalcopyrite both in the

diorite porphyry and the sedimentary rocks. In the mineralization zone SC, distinguished mineralization was not found.

Rock geochemical survey of S. Imbak Sub-area North and South shows that the most prominent geochemical anomalies occur in the area covering the mineralization zone NA of the North to the west part of the mineralization zone SA of the South characterized by Au, As and Cu associated by Pb and Zn. The area covering the mineral showing IMS-2 in the mineralization zone SB is characterized by Cu, Au and S. While, clear chemical anomaly is not found in the mineralization zone SC. The elements such as Ca, Mg, Na and Sr are considered to be indicator of the alteration. All these elements are depleted in the mineralization zones. While, an enrichment of K through the mineralization and alteration is presumed only in the mineralization zone NA of the S. Imbak Sub-area North.

In the S. Imbak Sub-area North, a clear alteration zoning similar to typical porphyry copper mineralization was obtained. The center of the alteration, corresponding to the phyllic zone, is located in the west part of the mineralization zone NA and it is surrounded by propylitic zone and argillic zone. Although, clear zoning of the alteration was not found in the S. Imbak Sub-area South, alteration in the mineralization zones SA and SB are slightly higher than surrounding areas because of the occurrences of quartz rich samples and sericite abundant samples.

The filling temperature of fluid inclusion collected in the mineralization zones NA, SA and SB show that average temperature of all the samples fall in a range of from 300° C to 400° C, correspond to the temperature of phyllic zone of the typical porphyry copper type.

From the above, the mineralization zone NA of the S. Imbak Sub-area North is the center of the mineralization and alteration in the S. Imbak Sub-area. While, the mineralization zones SA and SB are the centers of the mineralization and alteration in the S. Imbak Sub-area South and more intense alteration and mineralization are expected underneath the surface. Therefore, these two zones are considered to be the most promising area in the S. Imbak Sub-area South.

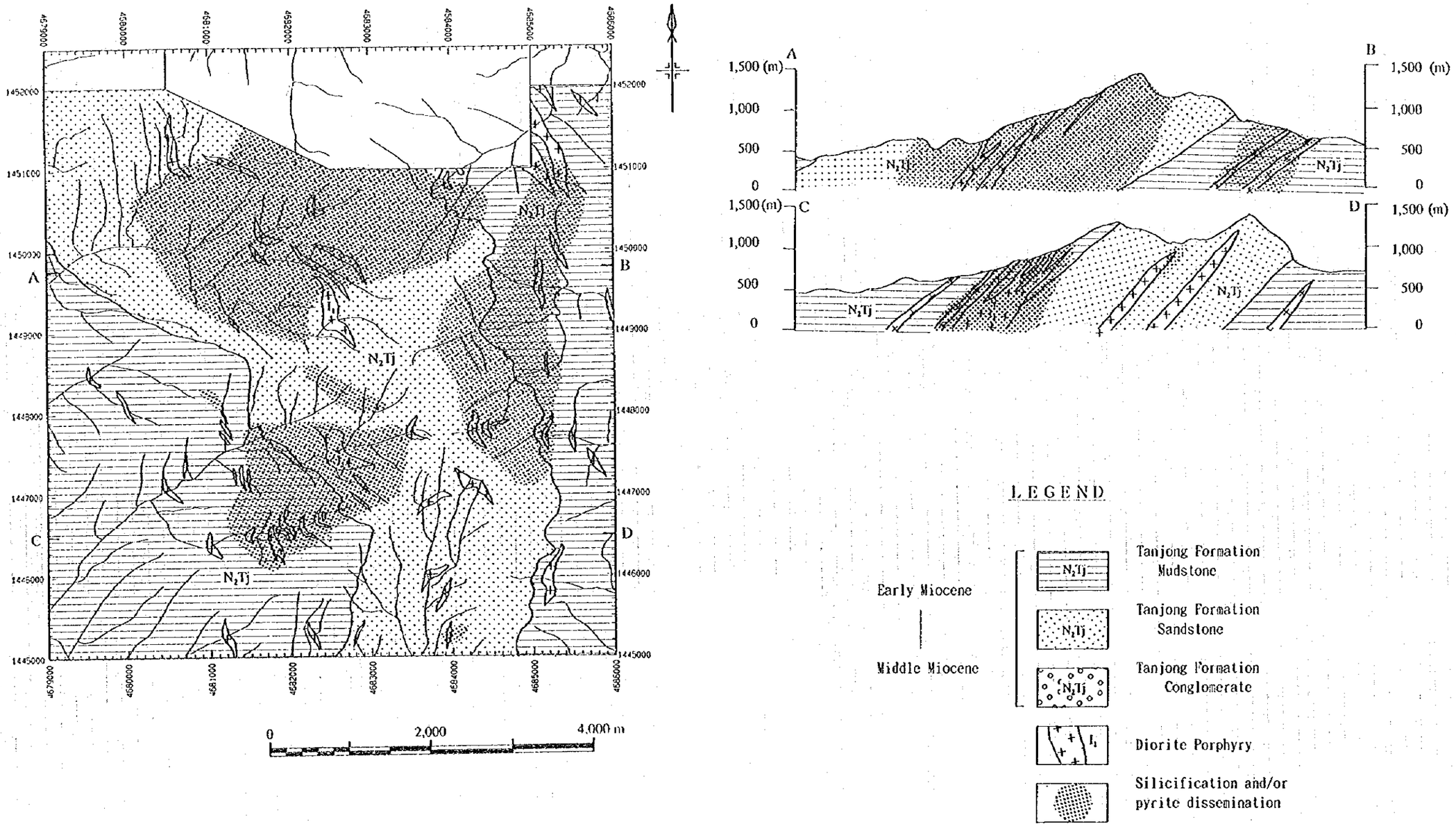


Fig. II-2-1 Geological map and cross sections of S. Imbak Sub-area South

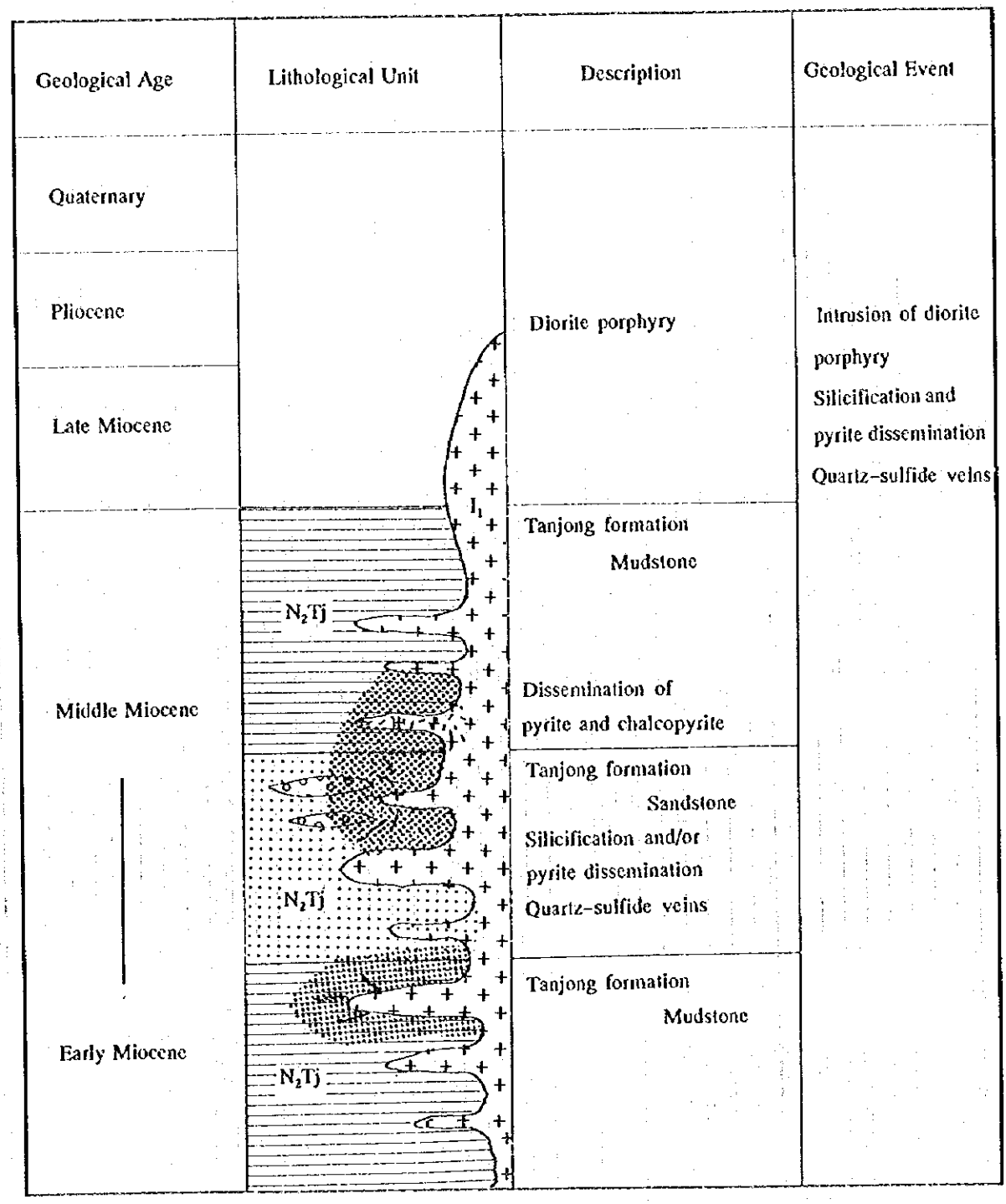
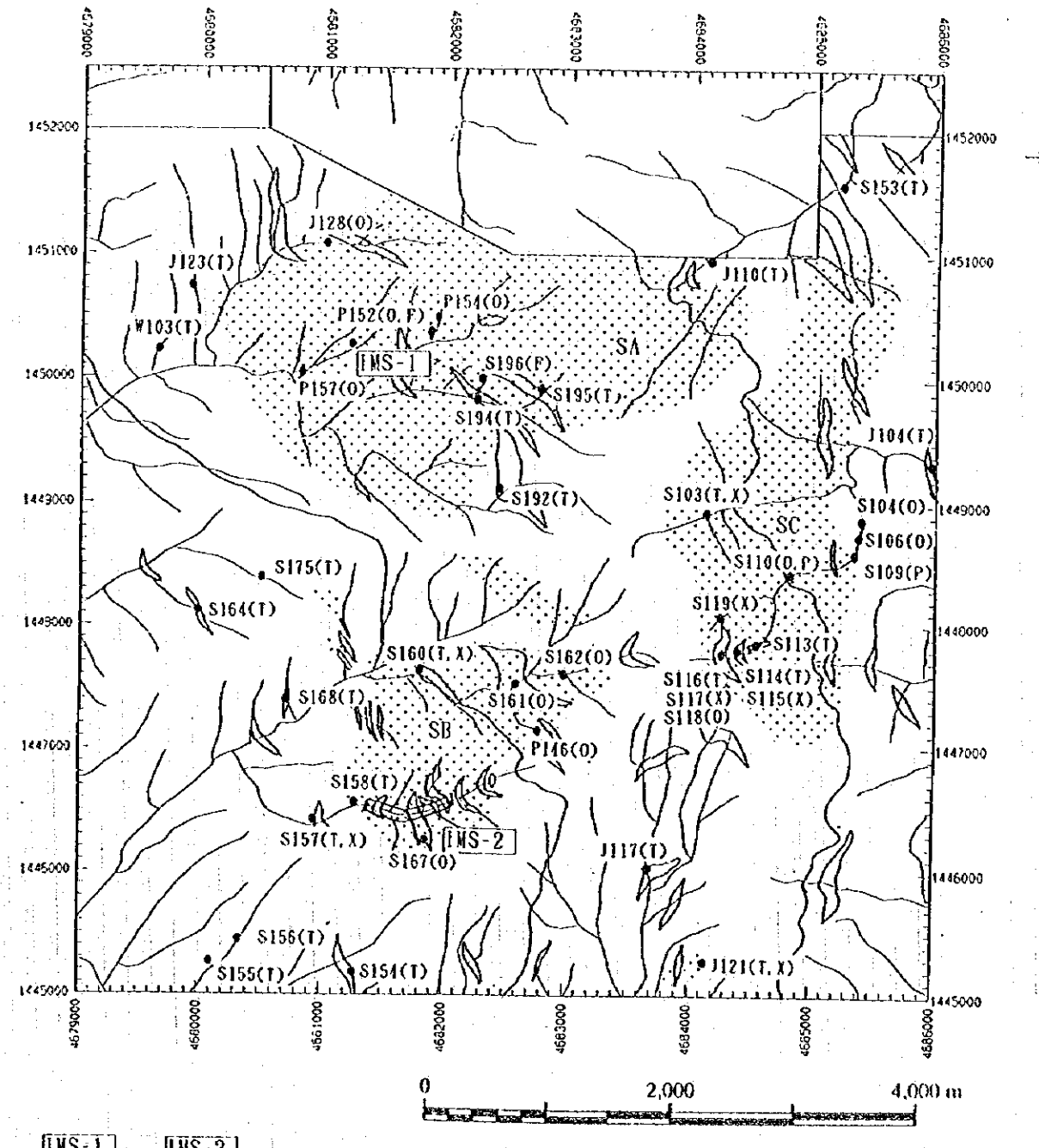


Fig. II-2-2 Schematic lithological succession of S. Imbak Sub-area South



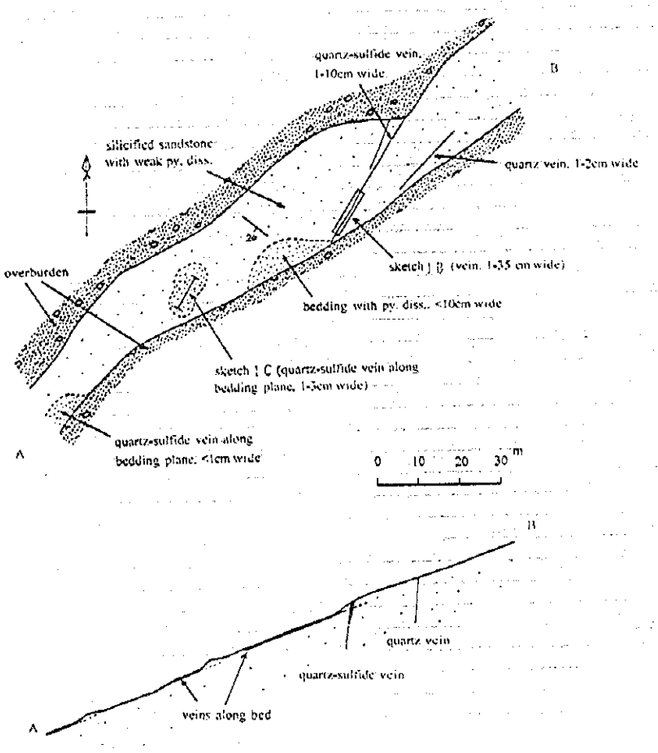
IMS-1 IMS-2

P164(O)
S198(O, P)
S199(F)
S200(O)
S201(O)
S202(O, P)
S203(O)
S204(O, P, F)

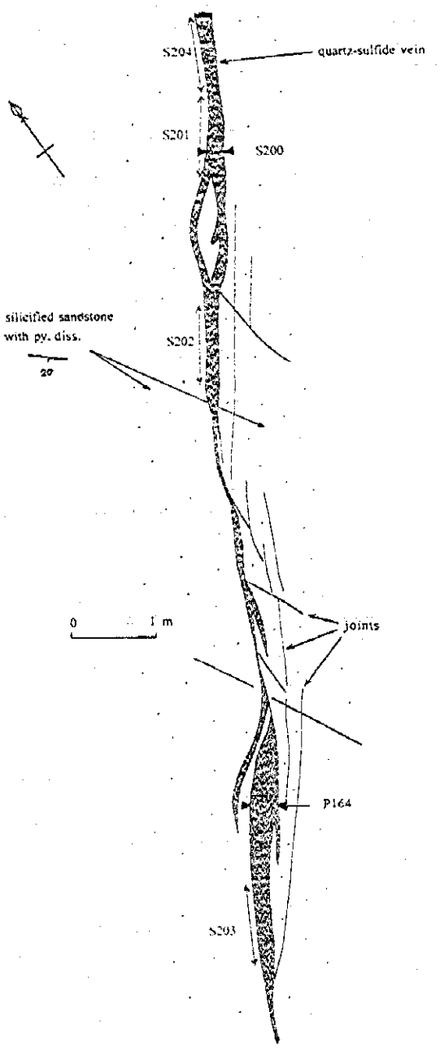
P136(O)
P137(O)
P138(O)
P139(O)
P140(O)
P141(O)
P142(O)
P143(O)
P144(O)
P145(O)
S159(T)
S169(P, T)
S171(O, P, F)
S172(T)
S173(F)
S174(P)

(O): Ore assaying
(P): Polished section
(T): Thin section
(X): X-ray diffraction
(F): Fluid inclusion filling temperature
IMS-1 Mineral showing

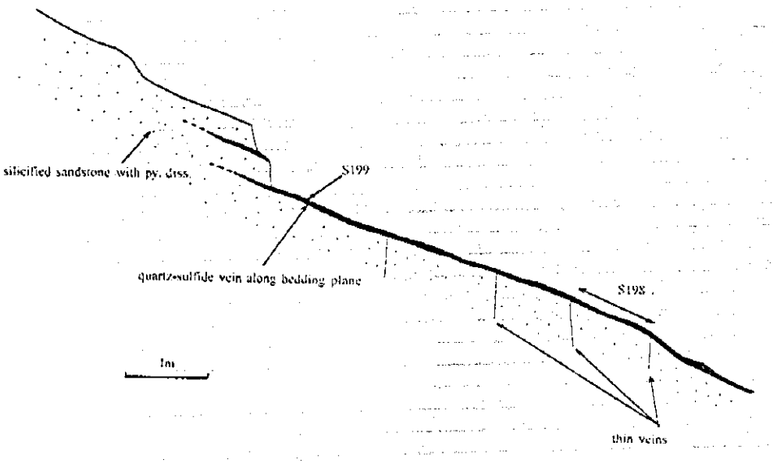
Fig. II-2-3 Location of mineral showings and laboratory work samples



IMS-1 sketch 1A

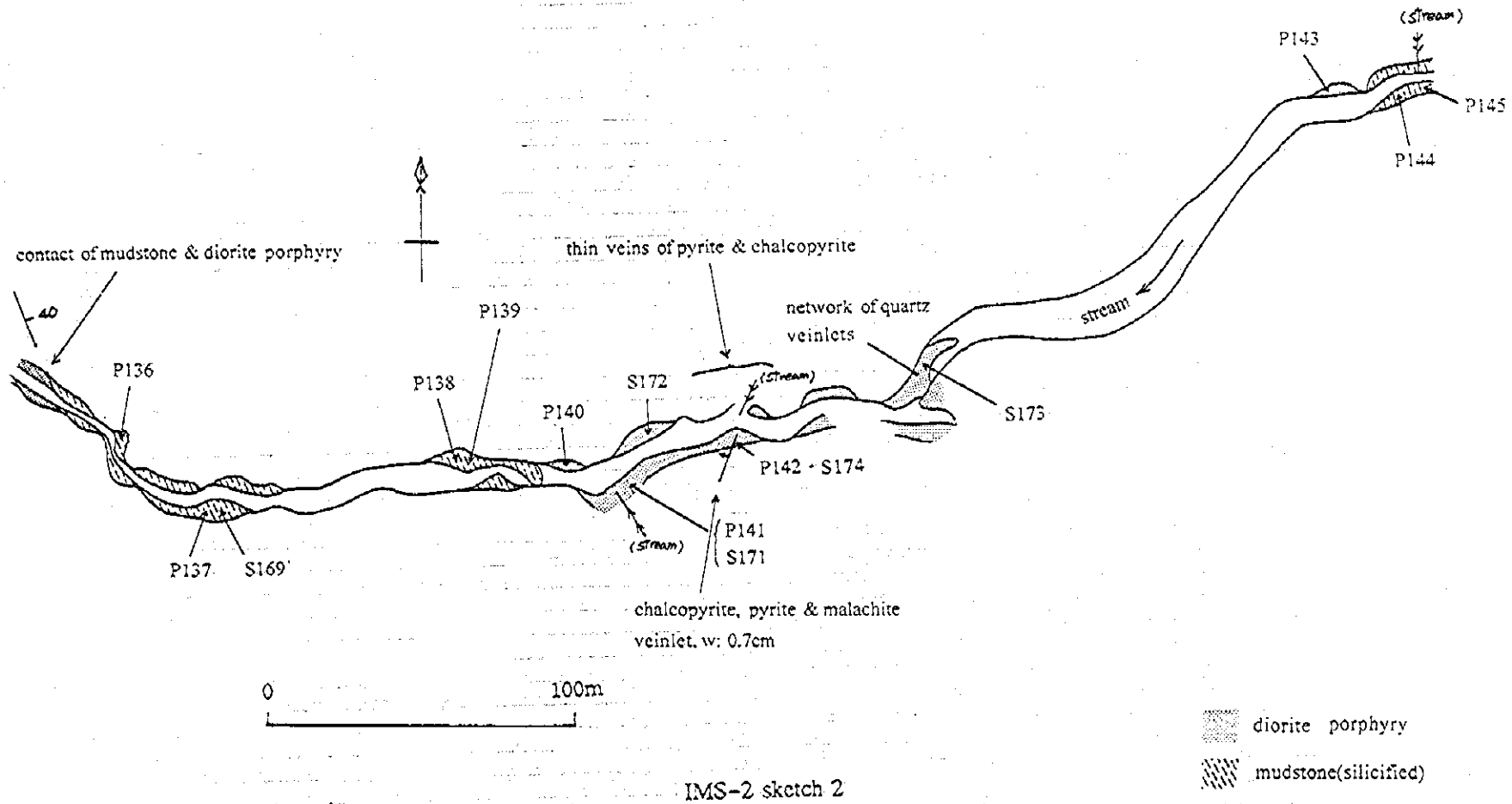


IMS-1 sketch 1B



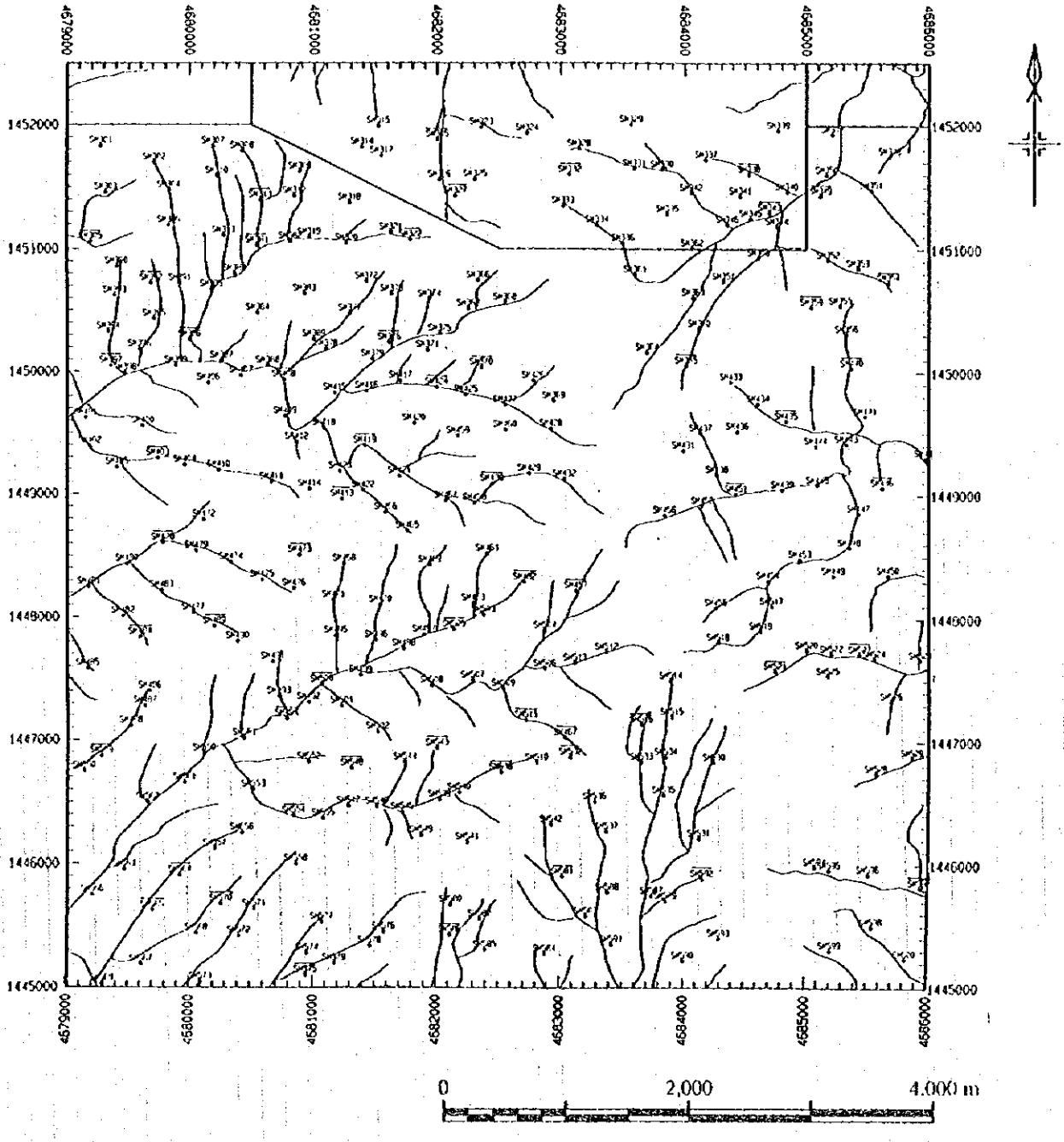
IMS-1 sketch 1C

Fig. Ⅱ-2-4 Occurrences of mineralization (1)



IMS-2 sketch 2

Fig. II-2-4 Occurrences of mineralization (2)



SM301 Location of rock samples (geochemical survey)

SM316 Location of rock samples (geochemical survey, X-ray diffraction analysis)

Fig. II-2-5 Location map of rock geochemical samples

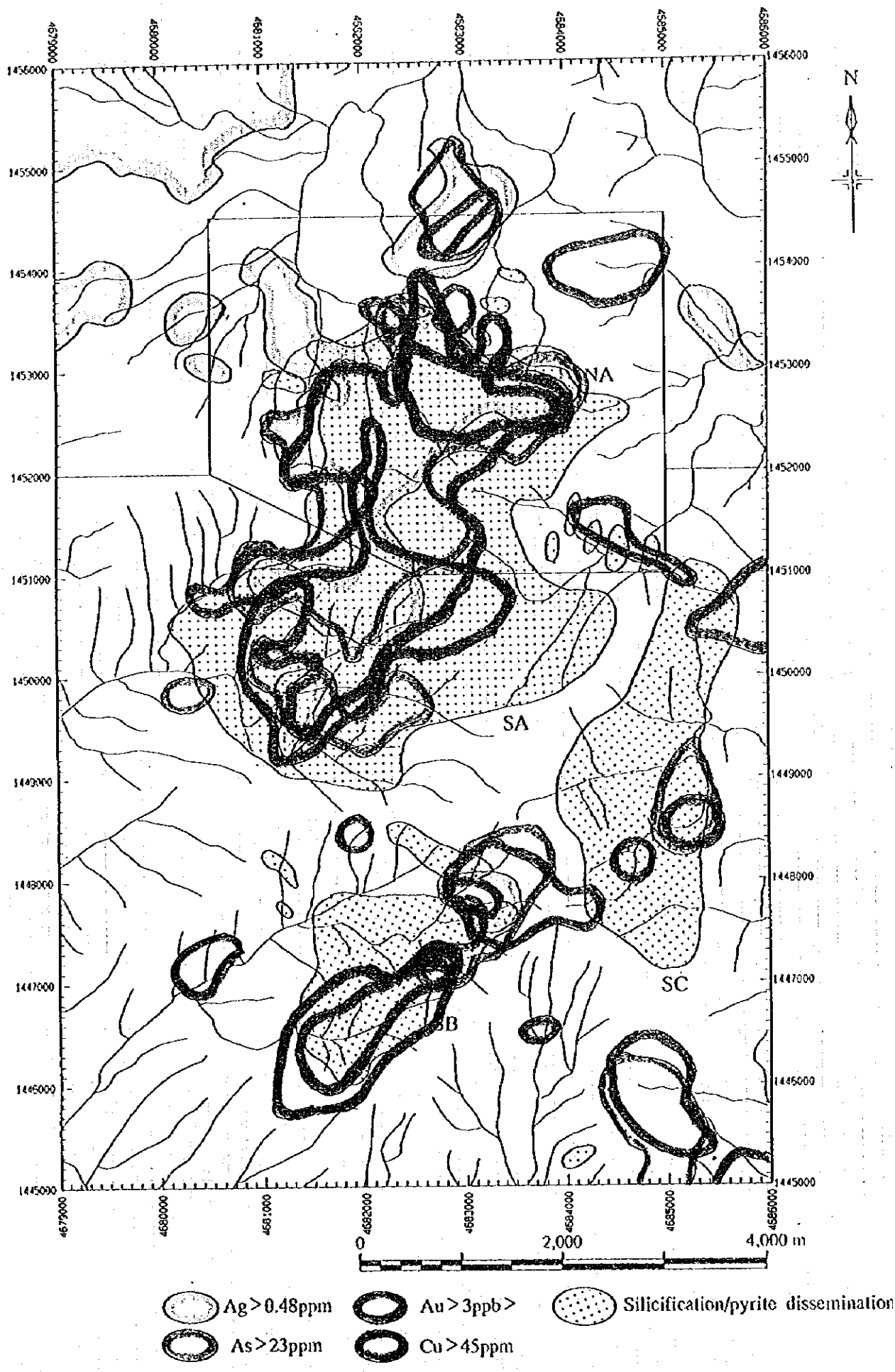
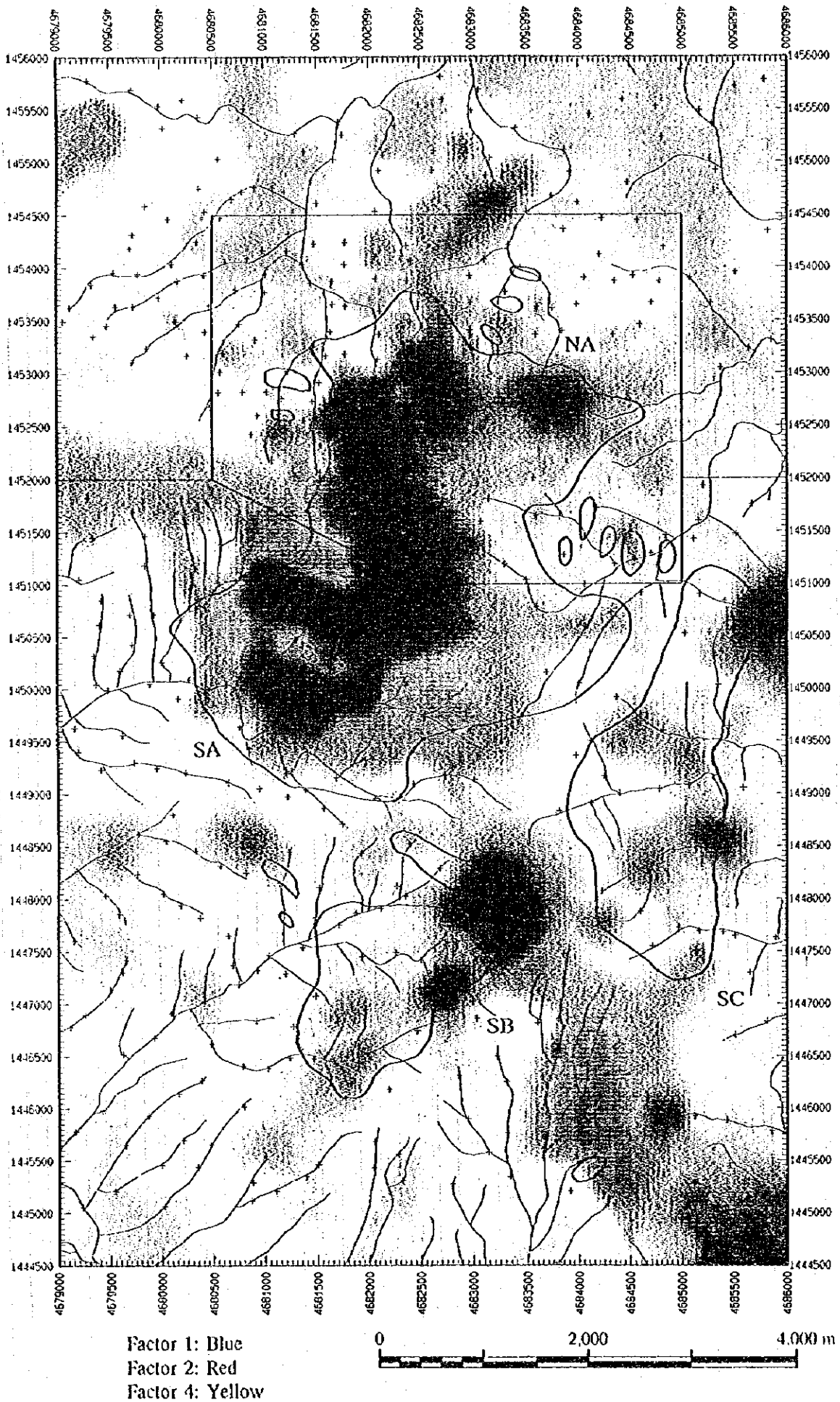


Fig. II-2-6 Distribution of geochemical anomalous zones in S. Imbak Sub-area



Factor 1: Blue
Factor 2: Red
Factor 4: Yellow

Fig. II-2-7 Distribution of factor scores in S. Imbak Sub-area

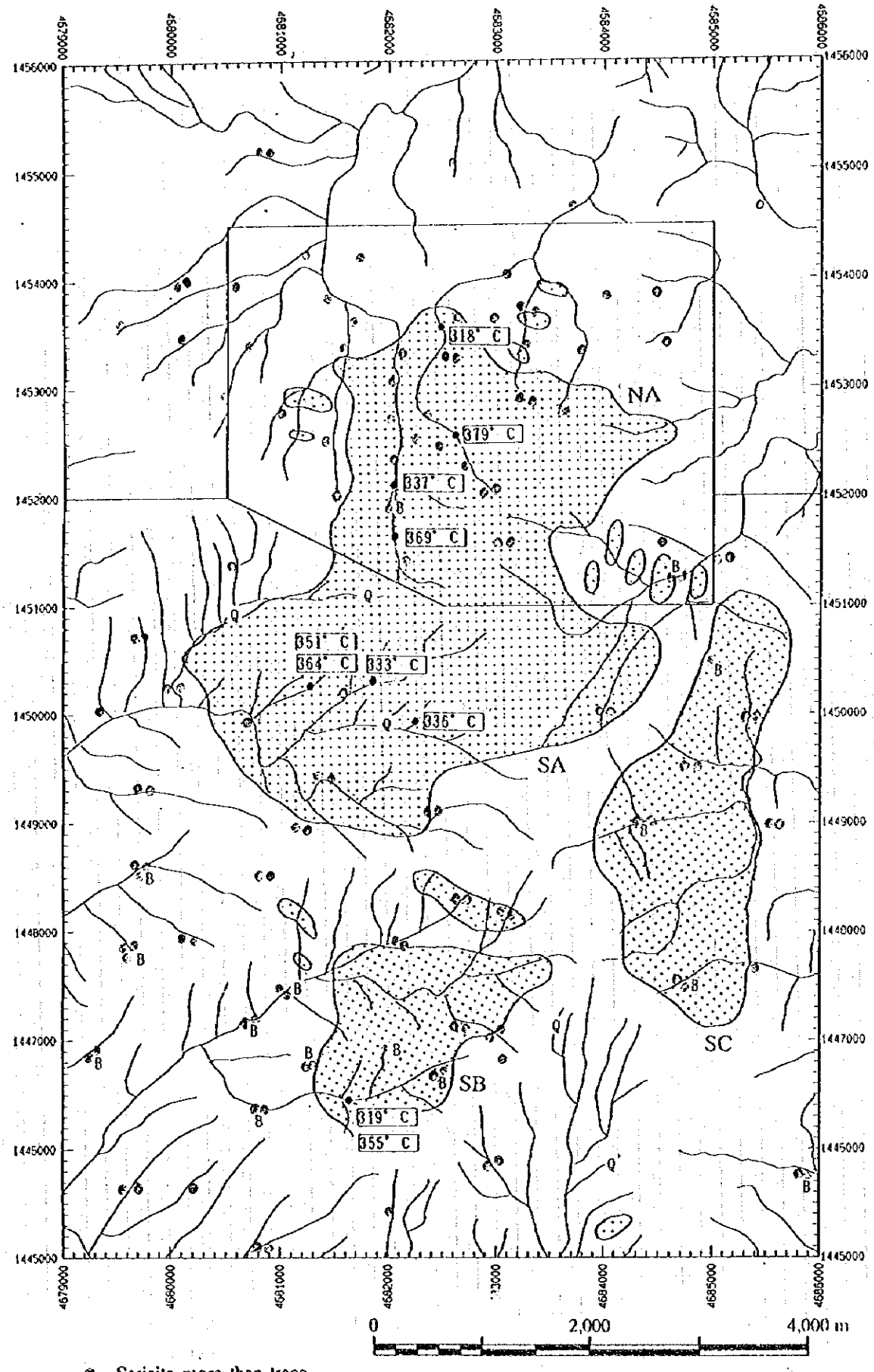


Fig. II-2-8 Results of X-ray diffraction analyses in S. Imbak Sub-area

Table Ⅱ-2-1 Description of thin section of S. Imbak Sub-area South (1)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Texture	Phenocryst, crystal & Rock Fragment: Quartz	Plagioclase	Clinopyroxene	Hornblende	Biotite	Rock fragments	Others	Groundmass, matrix, Accessory Minerals: Quartz	Plagioclase	Apatite	Sphene	Zircon	Tourmaline	Opaque minerals	Others	Secondary Minerals: Quartz	Sericite	Calcite	Chlorite	Biotite	Epidote	Kaolinite	Others	Remarks
1	J104	1449.27	4685.99	Diorite Porphyry	porphyritic intergranular		+							◎	·				·		·	◎	◎	·			·		· *	*albite, altered fine diorite porphyry
2	J110	1450.97	4684.10	Diorite porphyry	porphyritic intergranular		+		◎					◎	·	·			+	+ *	·	+	+	○			·			*hornblende, relatively fresh diorite porphyry
3	J117	1445.66	4683.66	diorite porphyry	porphyritic granoblastic		◎		◎					◎	+		·		+	◎ *	·	+	+	+			·	·		*hornblende.
4	J121	1445.05	4684.05	Sandstone	clastic	◎					◎ *		+					·	·		·	·								*mudstone>sandstone, relatively well sorted sandstone
5	J123	1450.68	4679.93	Sandstone	clastic	◎	+				· *	· **	+		·		·	·	·			+	+							*mudstone **K-feldspar, fine sandstone, carbonated
6	S103	1448.92	4684.08	Mudstone	clastic	◎	+						◎		·			·	·			+	·					·		slightly sericitized mudstone
7	S113	1447.84	4684.53	Sandstone	clastic	◎	+						○				·	·			+	○						·		fine sandstone
8	S114	1447.77	4684.37	Diorite Porphyry	porphyritic granoblastic		○		◎	·				◎	·				+	+ *	·	·	·	+	+					*hornblende, slightly altered diorite porphyry
9	S116	1447.77	4684.24	Diorite Porphyry	porphyritic granoblastic		◎		◎					◎	·	·	·		+	+ *	+	·	○	○			·			*hornblende, altered diorite porphyry
10	S153	1451.56	4685.16	Diorite Porphyry	porphyritic granoblastic		○		◎					◎	·	·			·	+ *	·	+	○	+			·			*hornblende, slightly altered diorite porphyry
11	S154	1445.10	4681.22	Diorite Porphyry	porphyritic granoblastic			○	◎					◎	·		·		+	○ *				○	+	·				*clinopyroxene, no plagioclase phenocryst
12	S155	1445.18	4680.10	Sandstone	clastic	◎	+				· *		◎				·	·	·		·	○		·						*mudstone, slightly sericitized fine sandstone
13	S156	1445.38	4680.32	Mudstone	clastic	◎	·						◎					·	·			○		·						slightly sericitized mudstone
14	S157	1446.37	4680.91	Diorite Porphyry	porphyrytic, hypidiomorphic granular			○	◎					◎	·		·		+	○ +	·			+		·	·			*clinopyroxene **K-feldspar

Table Ⅱ-2-1 Description of thin section of S. Imbak Sub-area South (2)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Texture	Phenocryst. crystal. & Rock Fragment: Quartz	Plagioclase	Clinopyroxene	Hornblende	Biotite	Rock fragments	Others	Groundmass. matrix. Accessory Minerals: Quartz	Plagioclase	Apatite	Sphene	Zircon	Tourmaline	Opaque minerals	Others	Secondary Minerals: Quartz	Sericite	Calcite	Chlorite	Biotite	Epidote	Kaolinite	Others	Remarks
15	S158	1446.51	4681.32	Mudstone	clastic	◎	·						◎					·	+		·	◎		·					sericitized mudstone
16	S159	1446.46	4681.82	Diorite Porphyry	porphyritic granoblastic		◎	+	◎	○			+	◎	·		·		·	· ·	○	·			·	·		·	*clinopyroxene **biotite ***K-feldspar
17	S160	1447.59	4681.80	Diorite Porphyry	porphyritic granoblastic		◎		○ *	+ *				◎	·				·		◎	◎	◎	○			+		*only pseudomorph remains
18	S164	1448.05	4680.02	mudstone	clastic	◎	+						◎				·	·	·			○							relativel fresh mudstone
19	S168	1447.36	4680.71	Diorite Porphyry	porphyritic granoblastic		◎		○					◎	·				·	◎ *	·	+	+	+	−				*biotite, abundant biotite in the groundmass
20	S169	1446.49	4681.43	Mudstone	clastic	◎	·						◎				·	·	·		○	◎		−	·			· *	*albite, serisitized silicified mudstone
21	S172	1446.45	4681.74	Diorite Porphyry	porphyritic granoblastic		◎	+	◎	○				◎	·	·	·		−		◎	+	+	−	·				silicifeld diorite porphyry
22	S175	1448.32	4680.54	Mudstone	clastic	◎	+					· *	◎	+	·		·	·	·			○		·					*K-feldspar
23	S192	1449.10	4682.44	Diorite Porphyry	porphyritic intergranular		◎		◎	+				◎	+				+		+	·	○	−					carbonated diorite porphyry
24	S194	1449.83	4682.27	Conglomarate	clastic						+ *		◎				·	·	+		○	○		·					*sandstone silicified and sericitized
25	S195	1449.80	4682.74	Conglomarate	clastic						◎ *		◎					·	+		◎	+		○			○	− **	*mudstone>sandstone **illite strongly altered
26	W103	1450.18	4679.61	Sandstone	clastic	◎	+				· *	· **	◎				·	·	·			○		·					*K-feldspar **mudstone

◎: abundant ○: common +: a little ·: rare

Table Ⅱ-2-2 Description of polished sections of S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	Descriptions	Ore minerals: Chalcopyrite	Bornite	Chalcocite	Native gold	Sphalerite	Galena	Pyrite	Powder pyrite	Pyrrhotite	Marcasite	Arsenopyrite	Magnetite	Hematite	Geothite	Gang minerals	Remarks
1	S109	1448.57	4685.34	Sp-Py vein in mudstone					○	+	○	·			·	·		+	○	
2	S110	1448.45	4684.84	Py-Sp-Qz vein in mudstone	·					·	○	+		·	○	·			· °	Py-Ap veinlet and Ap dism.
3	S169	1446.49	4681.43	Py dism. mudstone	·						+								◎	disseminated
4	S171	1446.42	4681.72	Py-Cp-Ms vein in Dio. Porp.							+								◎	disseminated
5	S174	1446.43	4681.83	Py dism. Diorite Porphyry	·						·					·			◎	disseminated
6	S193	1450.14	4681.00	Qz-Py-Cp vein in sandstone	+						◎	○							· °	massive
7	S202	1450.17	4681.08	Qz-Py-Cp vein in sandstone	+						·	·							◎ °	
8	S204	1450.17	4681.08	Qz-Py-Cp vein in sandstone	○						+	○			·				+ °	aggregate

◎: abundant ○: common +: a little ·: rare °: Quartz

Table Ⅱ-2-3 Results of X-ray diffraction analyses in S. Imbak Sub-area South (1)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Description	Identified Minerals: Se/Mo mixed layer	Kaolinite	Chlorite	Sericite	Montmorillonite	Quartz	Plagioclase	K-feldspar	Amphibole	Biotite	Epidote	Pyrite	Remarks
1	J121	1445.28	4684.05	silicified sandstone						◎							
2	S103	1448.92	4684.08	mudstone		+		+		◎	+			·			
3	S115	1447.77	4684.35	diorite porphyry with py. dism.		+	·			○	○	○				·	
4	S117	1447.77	4684.25	diorite porphyry with Py dism.		·		·		○	○	○				·	
5	S119	1448.06	4684.23	silicified sandstone with Py dism.		+		+		◎	+						
6	S157	1446.37	4680.91	diorite porphyry		+				+	○	○	+		·	+	
7	S160	1447.59	4681.80	sili. diorite porphyry with Py dism.		+		·		◎	○						

◎: abundant ○: common +: a little ·: rare

Table Ⅱ-2-3 Results of X-ray diffraction analyses in S. Imbak Sub-area South (2)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Description	Identified Minerals: Se/Mo mixed layer	Kaolinite	Chlorite	Sericite	Montmorillonite	Quartz	Plagioclase	K-feldspar	Amphibole	Biotite	Epidote	Pyrite	Remarks
1	SM305	1451.05	4679.21	gray sandstone		・	・	・		◎	+						・calcite
2	SM311	1451.39	4680.58	diorite porphyry		+				○	○	○	+				
3	SM316	1451.89	4682.01	silicified sandstone with Py dism.				+		◎		+		+			
4	SM322	1451.07	4681.79	light gray sandstone				・		◎							
5	SM327	1451.42	4682.16	silicified sandstone with Py dism.				+		◎						・	
6	SM332	1451.60	4683.08	sandstone with Py dism.			+	+		◎	○						
7	SM338	1451.60	4684.53	mudstone with Py dism.		+	○	・		◎	○					・	
8	SM343	1451.29	4684.70	silicified mudstone		+	+	+		◎	○			・			
9	SM349	1451.43	4685.11	gray mudstone			+	+		◎	+					◎	
10	SM354	1450.72	4685.65	mudstone with Py dism., brecciated						○							
11	SM359	1450.53	4685.03	silicified mudstone with Py dism.		+		+		◎		+		・			
12	SM365	1450.05	4684.03	silicified sandstone			+	+		◎	○						
13	SM370	1450.04	4682.26	silicified conglomarate with Py dism.				・		◎							
14	SM376	1450.24	4681.61	diorite porphyry with Py dism.			+			○	○	○	+			・	
15	SM381	1451.02	4680.56	sandstone		+		・	・	◎							
16	SM386	1450.26	4680.01	gray sandstone		+	+	+		◎	○						
17	SM392	1450.72	4679.70	dark gray mudstone			+	+	・	◎	○						
18	SM397	1450.05	4679.87	gray sandstone			+	・	・	◎	○					・	
19	SM403	1449.30	4679.74	gray sandstone		+	+	+		◎	○					・	
20	SM408	1449.94	4680.76	sandstone with Py dism.		+	+	+		◎	+					・	

◎: abundant ○: common +: a little ・: rare

Table Ⅱ-2-3 Results of X-ray diffraction analyses in S. Imbak Sub-area South (3)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Description	Identified Minerals: Se/Mo mixed layer	Kaolinite	Chlorite	Sericite	Montmorillonite	Quartz	Plagioclase	K-feldspar	Amphibole	Biotite	Epidote	Pyrite	Remarks
21	SM413	1448.97	4681.22	gray sandstone			−	+		◎	○						
22	SM419	1449.40	4681.41	silicified sandstone with Py dism.		+	+	+		◎	○						
23	SM424	1449.88	4681.99	silicified conglomarate with Py dism.			·	+		◎							
24	SM430	1449.10	4682.43	diorite porphyry			+	+		○	◎	○	○				
25	SM435	1449.60	4684.82	dark gray mudstone		+	+	+		◎	○					·	
26	SM440	1450.03	4685.35	diorite porphyry		+	+	+		○	○	○				·	
27	SM446	1449.05	4685.59	dark gray mudstone		+	+	+		◎	○					·	· epidote
28	SM451	1449.07	4684.40	mudstone with Py dism.			+	+		◎	○			·		·	
29	SM457	1448.22	4683.10	silicified sandstone with Py dism.		+	+	+		◎						·	
30	SM462	1448.29	4682.68	silicified sandstone			+	+		◎	○	+					
31	SM467	1447.02	4683.00	gary sandstone		+	+	+		◎	○						
32	SM473	1448.52	4680.87	gray mudstone		+	○	+		◎	○					·	
33	SM478	1448.62	4679.78	dark gray mudstone	·	+	+	+		◎	○			·		·	
34	SM484	1447.86	4679.59	dark gray mudstone	·	+	+	+		◎	○			·			· hematite
35	SM489	1447.94	4680.19	dark gray mudstone		+	+	+		◎	○						
36	SM494	1447.19	4680.75	silicified mudstone with Py dism.		+	+	+		◎	○			·			
37	SM500	1447.46	4681.04	silicified mudstone		+	+	+		◎	○			·			
38	SM505	1447.91	4682.12	silicified sandstone			+	+		◎	○	+					· calcite
39	SM511	1447.17	4682.68	silicified sandstone with Py dism.			+	+		◎						+	
40	SM516	1447.13	4683.61	sheared sandstone						◎							

◎: abundant ○: common +: a little ·: rare

Table Ⅱ-2-3 Results of X-ray diffraction analyses in S. Imbak Sub-area South (4)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Description	Identified Minerals: Se/Mo mixed layer	Kaolinite	Chlorite	Sericite	Montmorillonite	Quartz	Plagioclase	K-feldspar	Amphibole	Biotite	Epidote	Pyrite	Remarks
41	SM521	1447.55	4684.71	sandstone with Py dism.			+	+		◎	○			·		+	· epidote
42	SM527	1447.69	4685.40	diorite porphyry with Py dism.			○	·		◎	◎					·	
43	SM532	1446.86	4683.04	diorite porphyry			+			◎	○	○	+				
44	SM538	1446.75	4682.47	silicified mudstone with py-Cp dism.			+	+		◎	○			·		·	
45	SM543	1446.95	4681.96	silicified mudstone		+		+		◎				·			· goethite
46	SM548	1446.79	4681.27	mudstone with Py dism.			+	+		◎	○			·			
47	SM554	1446.41	4680.79	dark gray mudstone			+	+		◎	○			·			
48	SM559	1446.90	4679.26	gray mudstone			+	+		◎	○			·			
49	SM565	1445.65	4679.64	gray mudstone			+	+		◎	○						
50	SM570	1445.70	4680.20	gray mudstone			+	·		◎	○						
51	SM575	1445.12	4680.87	dark gray mudstone			+	+		◎	○						
52	SM581	1445.90	4682.95	dark gray sandstone			+	+		◎	○						
53	SM586	1445.43	4682.04	gray sandstone			+	·		◎	○						
54	SM592	1445.87	4684.08	light gray sandstone						◎	◎						
55	SM597	1445.78	4685.85	dark gray mudstone	+		○			◎	+			·		·	

◎: abundant ○: common +: a little ·: rare

Table Ⅱ-2-4 Assay results of S. Imbak Sub-area South (1)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Descriptions	Assay results Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	S (%)	Remark sampl width
1	J128	1451.06	4680.98	Py dism. mudstone	<0.1	14.8	90	56	72	<1	4.08	grab sample
2	P136	1446.49	4681.39	sili. mudstone with Py dism./film	<0.1	0.4	1085	54	45	10	0.29	w.1.00
3	P137	1446.49	4681.43	sili. mudstone with Py dism./film	<0.1	<0.1	338	29	38	31	0.19	w.1.00
4	P138	1446.45	4681.60	sili. mudstone with Py dism./film	<0.1	<0.1	370	34	38	36	0.11	w.1.00
5	P139	1446.45	4681.62	sili. mudstone with Py dism./film	<0.1	0.3	253	124	107	14	0.20	w.1.00
6	P140	1446.45	4681.66	diorite porphyry with Py dism./film	<0.1	0.6	936	40	85	15	0.42	w.1.00
7	P141	1446.42	4681.72	diorite porphyry with Py dism./film	<0.1	0.2	1249	54	55	7	3.99	w.1.00
8	P142	1446.43	4681.83	diorite porphyry with Py dism./film	<0.1	2.7	211	62	371	3	4.03	w.1.00
9	P143	1446.51	4681.94	diorite porphyry with Py dism./film	<0.1	0.7	1950	34	42	33	0.39	w.1.00
10	P144	1446.52	4681.97	sili. mudstone with Py dism./film	<0.1	1.7	759	82	56	40	0.73	w.1.00
11	P145	1446.53	4682.53	sili. mudstone with Py dism.	<0.1	1.3	1136	63	104	12	0.82	w.1.00
12	P146	1447.14	4682.74	sili. dsndstone with Py dism.	0.2	1.9	86	88	73	2	3.71	w.1.00
13	P152	1450.31	4681.83	Qz-Py vein 1.5cm wide in sandstone	<0.1	10.8	1110	60	125	8	0.73	grab sample
14	P154	1450.42	4681.91	Qz-Py vein 1.5 cm wide and sandstone	<0.1	5.1	445	31	37	8	3.49	grab sample
15	P157	1449.99	4680.73	Py vein 5cm wide in sandstone	<0.1	37.8	993	1251	425	3	7.75	w.2.00
16	P164	1450.17	4681.07	Qz-Py-Cp vein 35cm wide in sandstone	0.4	61.9	22154	48	282	<1	7.60	w.0.35
17	S104	1448.84	4685.39	mudstone with Py dism.	<0.1	0.2	89	33	93	3	0.70	w.1.00
18	S106	1448.67	4685.34	Py dism. mudstone with Qz-lim veinlets	<0.1	<0.1	23	119	167	<1	0.54	w.1.00
19	S110	1448.45	4684.84	Py-Sp-Qz vein 1 cm wide and sandstone	1.1	8.8	309	3717	4380	3	19.70	grab sample
20	S118	1447.77	4684.25	diorite porphyry with Py dism.	<0.1	0.4	114	64	332	3	0.87	grab sample

Table II-2-4 Assay results of S. Imbak Sub-area South (2)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Descriptions	Assay results Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)	Mo (ppm)	S (%)	Remarks and sampling width (m)
21	S161	1447.48	4682.54	sili. mudstone with Py dism.	<0.1	1.1	100	112	158	3	2.12	w.1.00
22	S162	1447.57	4682.96	Py dism/veinlet in sili sandstone	0.2	<0.1	49	42	40	<1	1.38	w.0.50
23	S167	1446.23	4681.87	Py dism/film in sili. mudstone	<0.1	0.6	398	159	273	8	0.94	w.1.00
24	S171	1446.42	4681.72	Py-Cp-Mc vein <1cm wide in dio.por.	<0.1	1.8	1558	62	73	11	5.59	grab sample
25	S198	1450.14	4681.00	Qz-Py-Cp vein 3cm wide in sandstone	0.1	122.9	58888	39	594	3	42.12	w.1.00
26	S200	1450.17	4681.07	Qz-Py-Cp vein 35 cm wide in sandstone	0.3	155.0	37097	71	621	<1	41.98	w.0.30
27	S201	1450.17	4681.08	Qz-Py-Cp vein 35 cm wide in sandstone	0.1	129.6	39868	82	776	1	28.04	w.1.00
28	S202	1450.17	4681.08	Qz-Py-Cp vein 35 cm wide in sandstone	0.9	158.0	46864	51	855	<1	17.20	w.1.00
29	S203	1450.17	4681.08	Qz-Py-Cp vein 35 cm wide in sandstone	1.1	506.7	77192	2001	5751	<1	33.11	W.1.00
30	S204	1450.17	4681.08	Qz-Py-Cp vein 35 cm wide in sandstone	0.4	295.0	93736	78	2198	<1	33.06	w.1.00

Table Ⅱ-2-5 Occurrences of mineralization in S. Imbak Sub-area South

Mineral Showing No.	Descriptions of Mineralization	Host Rock	Alteration	Assay Results						
				Sample No.	Sampling width (m)	Au (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
IMS-1	Quartz - sulfides (pyrite, chalcopyrite) veins, 1cm to 35cm wide cutting or concordant to bedding of sandstone. The largest one trends N35° E, dips 85° E and extends more than 35m across the outcrop. (Sketch 1A, 1B, 1C)	sandstone	silicification	P164	0.35	0.4	61.9	22154	48	282
				S198	1.00	0.1	122.9	58888	39	594
				S200	0.30	0.3	155.0	37097	71	621
				S201	1.00	0.1	129.6	39868	52	776
				S202	1.00	0.9	158.0	46864	51	855
				S203	1.00	1.1	506.7	77192	2001	5751
				S204	1.00	0.4	295.0	93736	78	2198
IMS-2	Dissemination of pyrite and chalcopyrite and some thin veins in diorite porphyry and mudstone. The main part of the mineralization occurs in the area 500m × few hundred meters. (Sketch 2)	mudstone and diorite porphyry	silicification	P136	1.00	<0.1	0.4	1085	54	45
				P137	1.00	<0.1	<0.1	338	29	38
				P138	1.00	<0.1	<0.1	370	34	38
				P139	1.00	<0.1	0.3	253	124	107
				P140	1.00	<0.1	0.6	936	40	85
				P141	1.00	<0.1	0.2	1249	54	55
				P142	1.00	<0.1	2.7	211	62	371
				P143	1.00	<0.1	0.7	1950	34	42
				P144	1.00	<0.1	1.7	759	82	56
				P145	1.00	<0.1	1.3	1136	63	104
				S171	grab	<0.1	1.8	1558	62	73

Table Ⅱ-2-6 Fluid inclusion filling temperature of S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	Descriptions	Number of measurement	Temperature range (° C)	Average Temperature (° C)	Remark
1	P152	1450.31	4681.83	Qz-Py vein. 1.5cm wide in sandstone	24	238 to 484	333.3	
	P152Tm	1450.31	4681.83		3	420 to 446	433.0	daughter minerals
2	S171	1446.42	4681.72	Py-Cp-Mc vein 1.0cm wide in Dio. Porp.	32	246 to 378	319.5	
3	S173	1446.46	4681.90	Qz vein 1.5cm wide in diorite porphyry	30	250 to 487	355.2	
	S173Tm	1446.46	4681.90		5	371 to 431	412.0	daughter minerals
4	S196	1449.30	4682.30	Qz vein 2.0cm wide in sandstone	25	232 to 415	336.4	
5	S199-1	1450.14	4681.00	Qz-Py-Cp vein. 3.0cm wide in sandstone	16	292 to 362	351.5	quartz vein
	S199-2	1450.14	4681.00		23	362 to 403	389.3	quartz vein with sulfides
6	S204	1450.17	4681.08	Qz-Py-Cp vein. 35cm wide in sandstone	30	330 to 384	364.3	

Table Ⅱ-2-7 Statistics of rock geochemical survey in S. Imbak Sub-area (1) (South)

Element	Statistics						EDA method*4		
	Below detection limit (%)	Maximum value	Minimum value	Mean*1 value (b)	Standard*2 deviation	b + 2S.D. *3	Median	Upper Wisker	Upper Fence
Ag (ppm)	58.0	10.27	< 0.02	0.036	0.756	1.15	0.01	0.20	4.99
As (ppm)	40.3	4,529	< 1	3.7	0.864	200.0	4.0	22.0	2,896.3
Au (ppb)	67.7	2,400	< 1	1.1	0.644	22.3	0.5	4.0	16.0
Ca (%)	22.3	4.91	< 0.01	0.08	0.879	4.600	0.110	0.460	—
Cu (ppm)	—	2,223	2	25.2	0.488	238.6	21.5	53.0	202.7
Hg (ppb)	10.7	1,440	< 10	30	0.440	226	29	65	252
K (%)	—	2.08	0.08	0.589	0.256	1.911	0.630	0.980	—
Mg (%)	1.0	3.73	< 0.01	0.500	0.547	—	0.760	1.260	—
Na (%)	—	3.06	0.04	0.362	0.491	—	0.615	0.850	—
Pb (ppm)	2.7	1,699	< 2	19.4	0.420	134.2	20.0	35.0	96.6
Rb (ppm)	—	335	1	83.9	0.334	—	94.5	152.0	—
S (%)	—	29.355	0.002	0.130	0.727	3.700	0.173	0.500	17.485
Sb (ppm)	0.3	245.2	< 0.2	8.28	0.320	36.23	7.80	13.50	35.15
Sr (ppm)	—	939	3	47.2	0.531	544.4	57.0	91.0	621.8
Zn (ppm)	—	1,875	5	55.5	0.394	340.3	70.0	100.0	328.0

*1: geometric mean *2: shown in logarithm *3: background value + 2 × standard deviation
*4: Exploratory Data Analysis (Kurzl H., 1988)

Table Ⅱ-2-7 Statistics of rock geochemical survey in S. Imbak Sub-area (2)
(North and South)

Element	Statistics						EDA method*4		
	Below detection limit (%)	Maximum value	Minimum value	Mean*1 value (b)	Standard*2 deviation	b + 2S.D. *3	Median	Upper Wisker	Upper Fence
Ag (ppm)	34.7	17.37	< 0.02	0.100	0.818	4.33	0.23	0.48	—
As (ppm)	29.7	1.3675	< 1	5.5	0.850	275.0	7.0	23.0	3.888.0
Au (ppb)	69.3	6.920	< 1	1.1	0.656	22.6	0.5	3.0	2.8
Ca (%)	18.6	5.58	< 0.01	0.09	0.829	3.99	0.110	0.350	—
Cu (ppm)	0.2	2.223	< 1	23.8	0.442	182.0	22.0	45.0	123.6
Hg (ppb)	17.5	2.289	< 10	26	0.472	224	26	57	274
K (%)	—	4.21	0.06	0.732	0.295	2.853	0.760	1.240	3.839
Mg (%)	1.0	3.73	< 0.01	0.546	0.497	—	0.760	1.240	—
Na (%)	—	4.20	0.02	0.438	0.487	4.133	0.690	0.990	—
Pb (ppm)	1.6	5.846	< 2	19.9	0.402	126.3	20.0	32.0	88.5
Rb (ppm)	—	335	1	81.6	0.321	—	95.0	146.0	—
S (%)	—	29.355	0.002	0.145	0.693	3.528	0.194	0.533	12.745
Sb (ppm)	7.2	245.2	< 0.2	4.28	0.611	71.47	6.00	11.20	50.76
Sr (ppm)	—	939	3	52.7	0.474	466.7	63.0	91.0	351.4
Zn (ppm)	—	2.950	4	59.8	0.371	330.1	71.0	103.0	267.3

*1: geometric mean *2: shown in logarithm *3: background value + 2 × standard deviation
*4: Exploratory Data Analysis (Kurzl H., 1988)

Table II-2-8 Results of factor analyses for rock samples in S. Imbak Sub-area

Element	Factor loading (Varimax rotation)				Commu-nality
	Factor 1	Factor 2	Factor 3	Factor 4	
Ag	-0.141	0.490	-0.500	-0.064	0.5139
As	-0.530	0.433	-0.093	-0.191	0.5131
Au	-0.425	0.579	0.089	-0.076	0.5295
Ca	0.908	0.086	0.094	0.004	0.8408
Cu	0.088	0.624	0.078	-0.102	0.4130
Hg	-0.030	0.068	0.329	-0.225	0.1645
K	0.335	0.167	-0.314	-0.771	0.8334
Mg	0.817	0.212	0.062	-0.327	0.8236
Na	0.866	-0.062	-0.212	-0.199	0.8385
Pb	0.099	0.532	0.097	-0.372	0.4412
Rb	0.219	0.268	0.111	-0.813	0.7926
S	0.216	0.658	0.078	-0.088	0.4926
Sb	-0.006	0.167	0.593	0.151	0.4023
Sr	0.853	0.024	0.018	-0.246	0.7888
Zn	0.587	0.434	0.029	-0.269	0.6057
F.C.*1	44.7 %	25.0 %	10.2 %	20.1 %	—

*1: Factor contribution

Part III Conclusions and recommendations

Chapter 1 Conclusions

1. S. Imbak Sub-area North

The S. Imbak Sub-area North consists of the early to middle Miocene Tanjong Formation and the diorite porphyry intruding to the Tanjong Formation. The mineralization of the area, closely associated with the intrusion of the diorite porphyry, occurs in the silicification/pyrite dissemination zone in the center to south part of the area and it shows mainly two type of occurrences: quartz sulfides veins in the sedimentary rocks and network veins of sphalerite and dissemination of sulfides in the diorite porphyry in the diorite porphyry.

The quartz-sulfides (pyrite, arsenopyrite, sphalerite, galena, chalcopyrite) veins of few cm to 25 cm wide sporadically occur in the sedimentary rocks of silicification/pyrite dissemination zone. These quartz-sulfides veins are classified into three types: Type ① Au and Ag vein, Au≧Ag, Type ② Au and Ag vein, Ag>Au, Type ③ Pb and Zn vein. Type ① and Type ② occur in the zone of higher alteration corresponding to phyllic zone in the west of the silicification/pyrite dissemination zone, while Type ③ tend to occur in the east part of the silicification/pyrite dissemination zone.

Among the five holes, the most prominent mineralization was found at MJSI-4 where sphalerite-(chalcopyrite) network veins and patches with Zn grade ranging from 0.40 % to 1.00 % occur in the diorite porphyry for 15 m . This Zn mineralization zone includes 3 m long Ag rich (Ag 37.2 g/t to 90.5 g/t) zone.

The geological information, mineral assemblage of ore minerals, filling temperature of fluid inclusion (300°C to 400°C) suggest that the most possible geological environment of mineralization in the S. Imbak Sub-area is that of similar to the outer margin of the porphyry copper environment.

Geophysical and subsequent drilling surveys based on IP anomaly of type 2 showed indications of finding promising mineralization zones in this survey area. For the case of a porphyry copper type deposit, the finding of IP anomaly of Type 1(low resistivity and high chargeability) is the ideal condition to select the drilling site. However, in this area IP anomalies of Type 2 (medium resistivity and high chargeability) seem to be better target, because the extension of mineralization/alteration zone on the surface and in the holes does not seem to be wide.

Two strong IP anomalous zones (NAa and NAb in Fig.Ⅲ-1-1), which showed a medium to high chargeability values of more than 20 mV/V, were detected by the geophysical survey (IP method) in Phase I and Phase II. Above-mentioned IP anomalies of Type 2 were generally detected in both areas.

The various surveys conducted in the S. Imbak Sub-area suggest that following two areas are most promising for the mineral potentiality (Fig. Ⅲ-1-1).

(1) The west part of the silisification/pyrite dissemination zone(NA), corresponding to center to south part of the geophysical survey lines D and E (NAa).

Reasons for selection

a) Alteration zoning and filling temperature of fluid inclusion suggest that the area is the center of mineralization in the S. Imbak Sub-area.

b) The quartz-sulfides veins with Au-Ag (Type ① and Type ②) occur in the area.

c) The area is covered by Au, Ag and Cu anomalies of rock geochemical survey.

d) Distribution of IP anomalies (chargeability of more than 25 mV/V and resistivity of less than 100 Ω-m) in the area.

e) The mineralization is more intensive in the drill holes located in the south (MJSI-4 and MJSI-5).

(2) The north part of the silisification/pyrite dissemination zone (NAb)

Reasons for selection

a) The intense mineralization in the diorite porphyry and the occurrences of Au-Ag quartz-sulfides veins close to the intrusion of the diorite porphyry were confirmed. The distribution of the diorite porphyry is expected underneath the surface in the area.

b) Distribution of Ag, Au and Cu anomalies of rock geochemical survey in the area.

d) Distribution of IP anomalies (chargeability of more than 25 mV/V and resistivity of less than 100 Ω-m) in the area.

2. S. Imbak Sub-area South

The S. Imbak Sub-area South, similar to the S. Imbak Sub-area North, consists of the early to middle Miocene Tanjong Formation and the diorite porphyry intruding to the Tanjong Formation. The mineralization of the area, closely associated with the intrusion of the diorite porphyry, occurs in the silicification/pyrite dissemination zone in the center of the north part (SA), center part (SB) and east part (SC).

The mineralization zone SA is considered to be the south extension of the silicification/pyrite dissemination zone of S. Imbak Sub-area North (NA) and characterized by Ag and Cu enriched quartz-sulfides veins and Type ② vein of the S. Imbak Sub-area North. The west part of the zone is covered by Au, As and Cu high value zones and alteration is slightly intensive than the surrounding area. The mineralization zone SB (mineral showing IMS-2) is characterized by dissemination of pyrite and chalcopyrite in the diorite porphyry and the sedimentary rocks and it is covered by anomalies of Au, Cu and S. The Cu grade is slightly low, however, it shows similar

mineralization to that of porphyry copper. Distinguished mineralization and clear geochemical anomaly were not found in the mineralization zone SC. The alteration zoning and fluid inclusion temperature suggest a similar environment to the phyllic zone of porphyry copper type mineralization for mineralization zones SA and SB.

The survey results suggest that the most potential areas for mineralization in the S. Imbak Sub-area south are the west part of the mineralization zone SA and the mineralization zone SB and further detail survey should be conducted in future.

Chapter 2 Recommendations

1. S. Imbak Sub-area North (Fig.Ⅲ-2-1)

For understanding the detail distribution of mineralization/alteration for deciding the drill sites in the two high potential areas of NAa and NAb, detail geophysical surveys such as electro-magnetic survey (EM method at 50 m grid), IP method at 100 m grid and Mise-a-la-Masse method applied to borehole or outcrop are recommended prior to the drilling operation. For both areas of NAa and NAb, a total of 7 drill holes are recommended. The each hole should be declined hole (-60°) with depth not shallower than 300 m.

2. S. Imbak Sub-area South (Fig.Ⅲ-2-2)

For the two mineralization zones SA and SB, detail geological survey and IP survey are recommended for understanding the mineralization of the area. Based on the results of IP survey, few drill holes should be examined for each area.

Mineralization zone SA

Area: 3.15 km^2 (1.5 km × 2.1 km)

IP survey lines: 12 km (1.5 km × 8 lines)

Mineralization zone SB

Area: 4.20 km^2 (2.0 km × 2.1 km)

IP survey lines: 16 km (2.0 km × 8 lines)

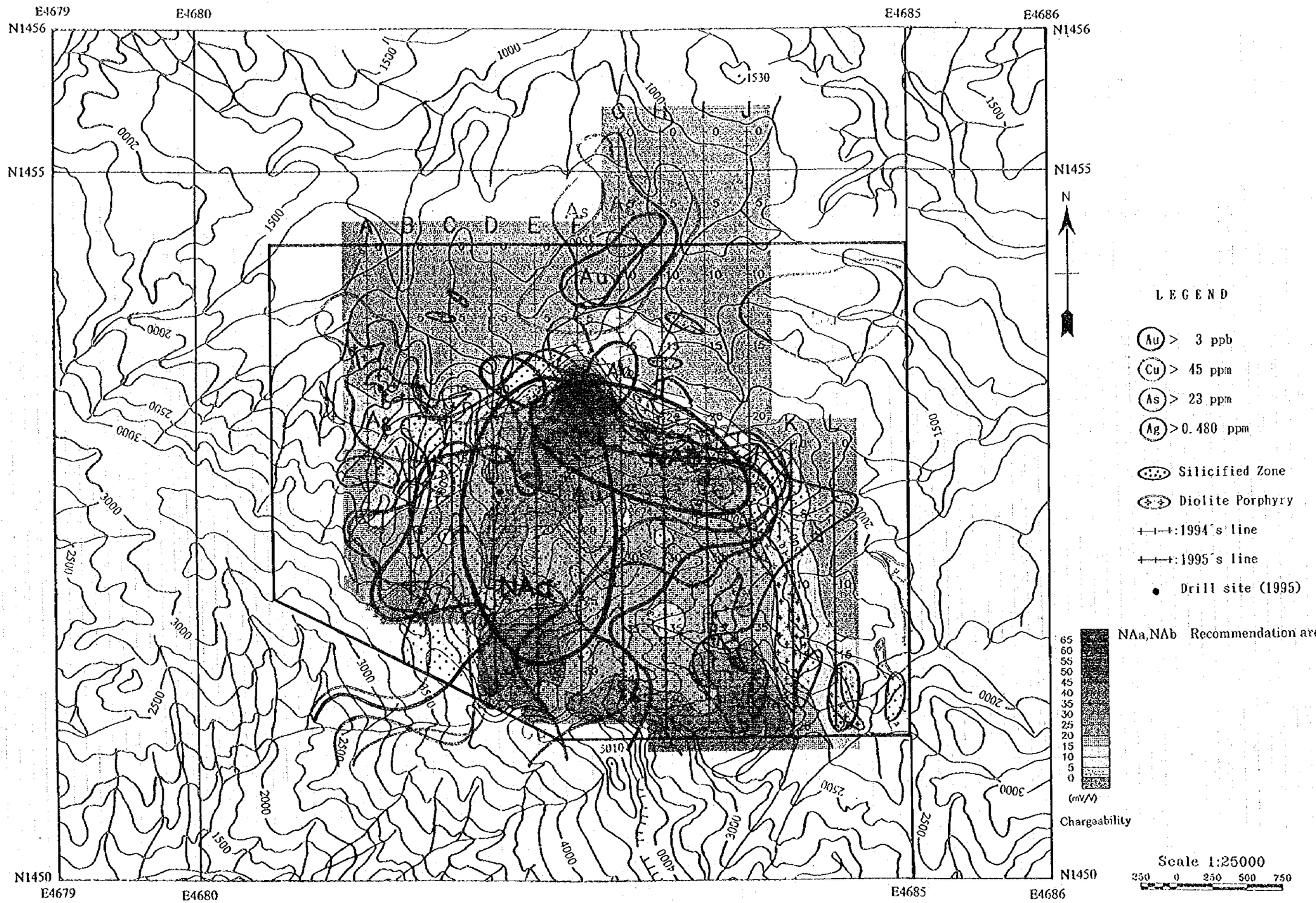


Fig. Ⅲ-1-1 Compilation of survey results in S. Imbak Sub-area North

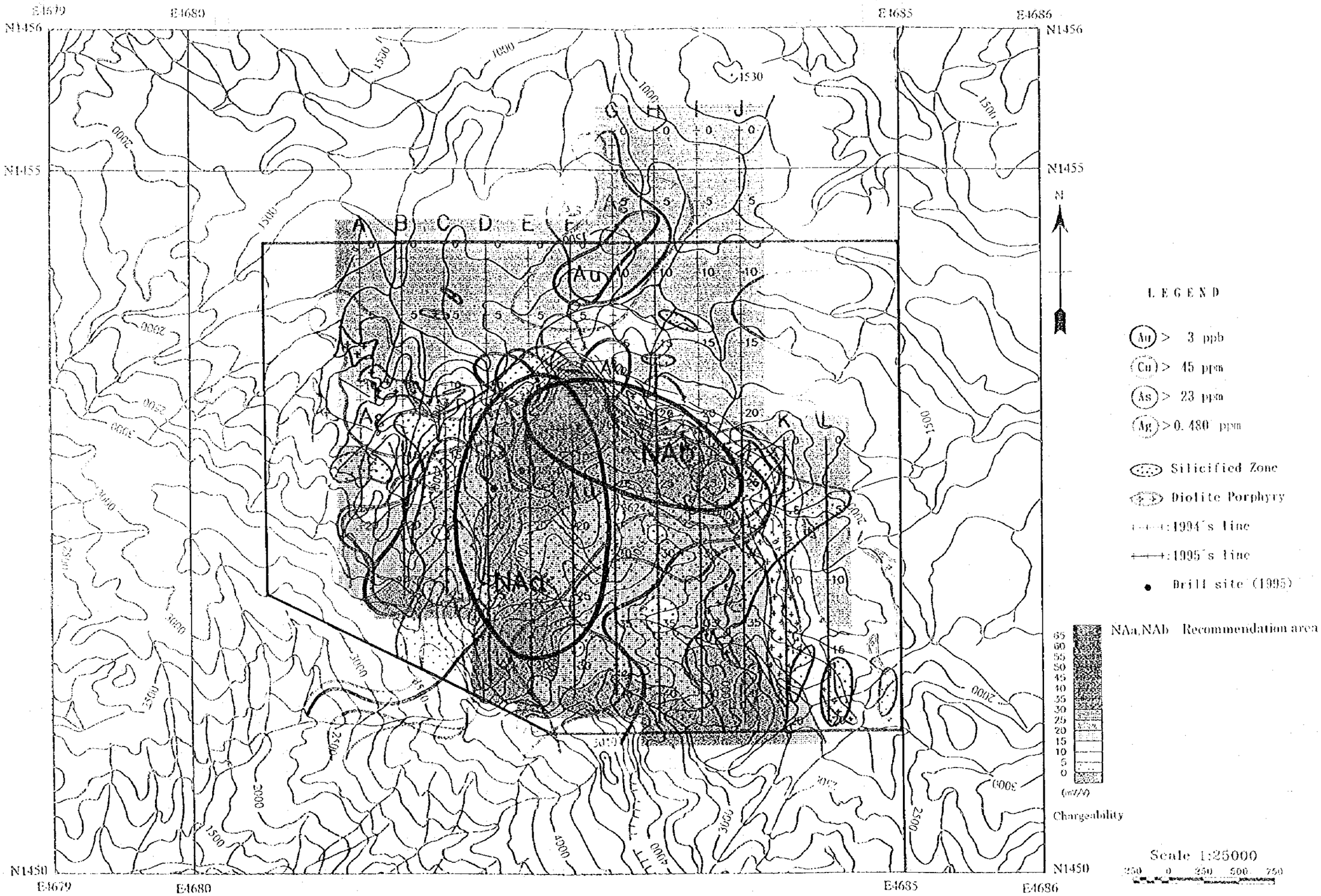


Fig. Ⅲ-1-1 Compilation of survey results in S. Imbak Sub-area North

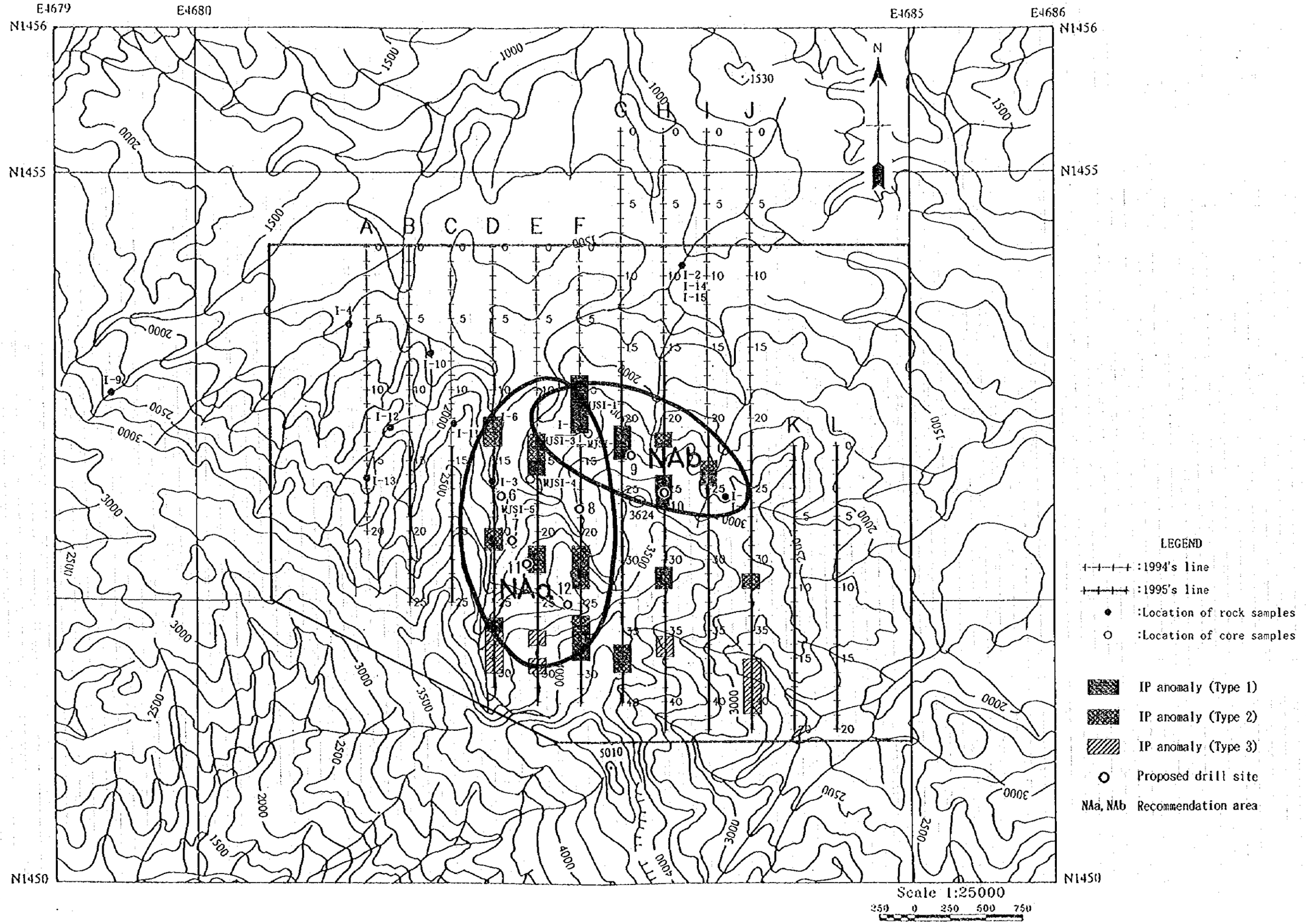
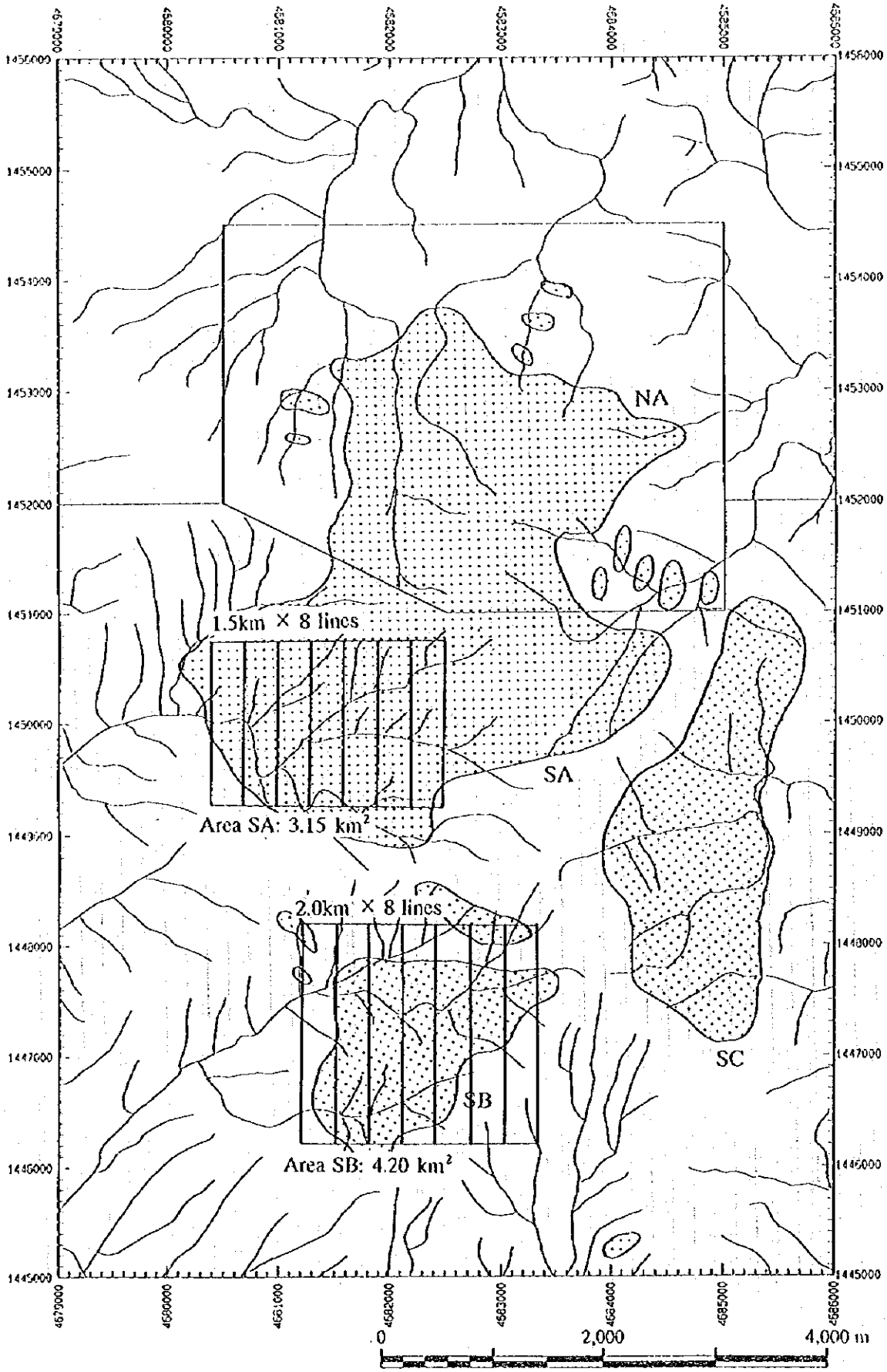


Fig. Ⅲ-2-1 Recommendation for future work in S. Imbak Sub-area North



Area of recommendation for future work

IP survey line

Silicification/pyrite dissemination

Fig. Ⅲ-2-2 Recommendation for future work in S. Imbak Sub-area South

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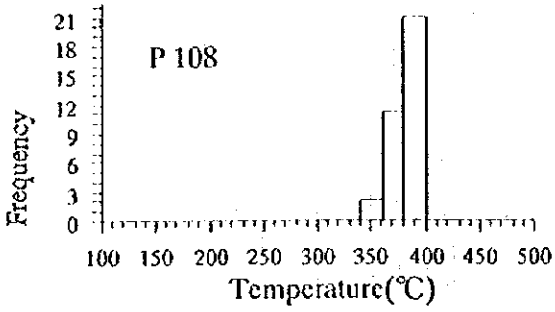
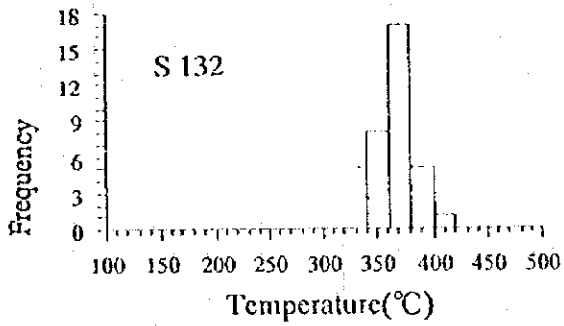
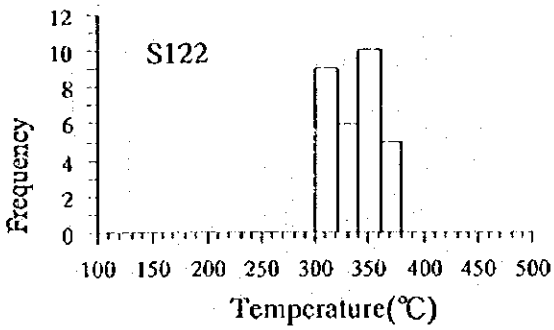
Appendix 1

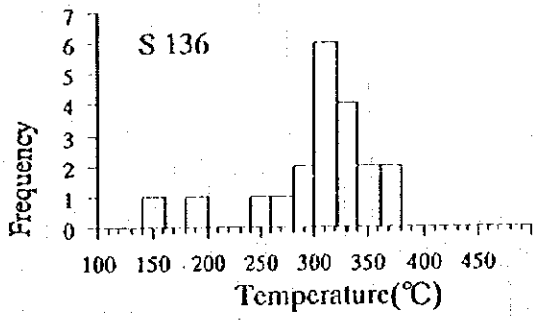
Fluid inclusion filling temperature

S. Imbak Sub-area North

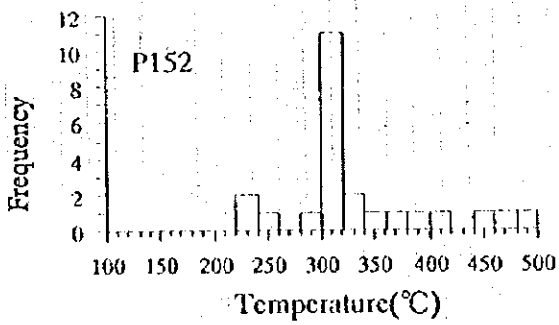


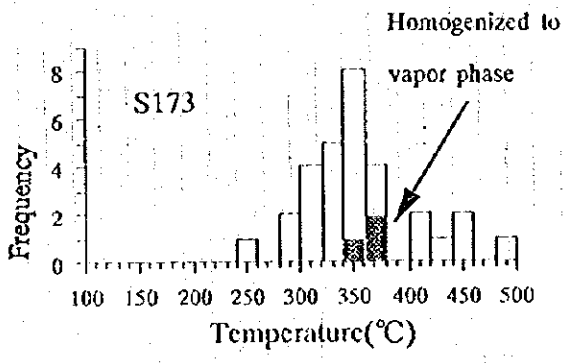


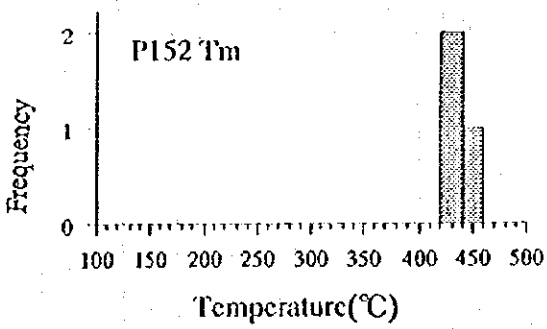




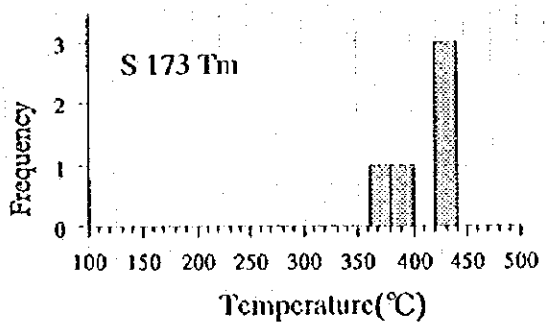
S. Imbak Sub-area South





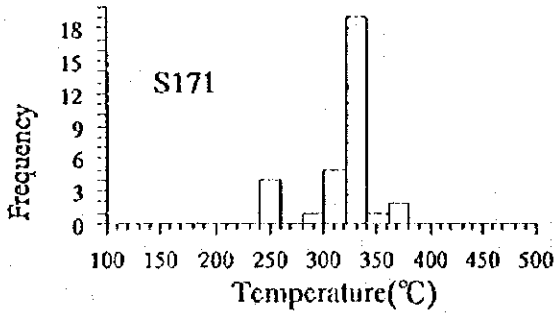


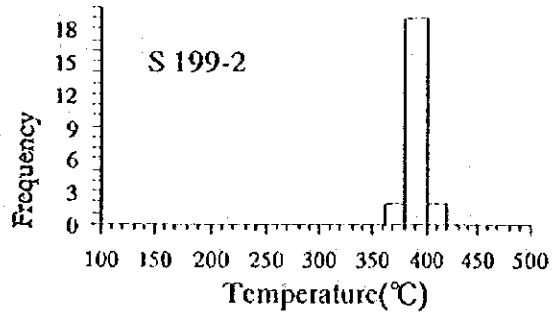
Melting temperature of daughter minerals

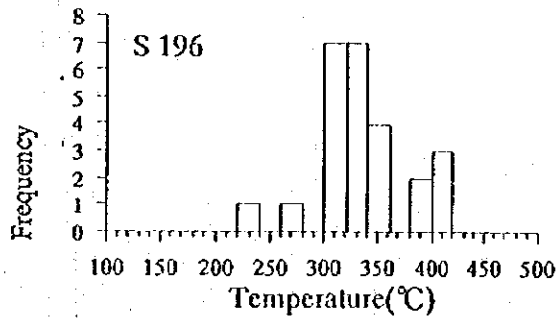


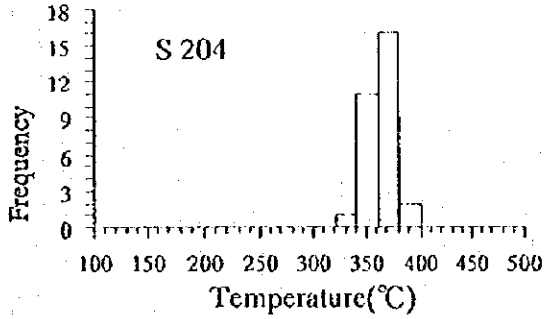
Melting temperature of daughter minerals

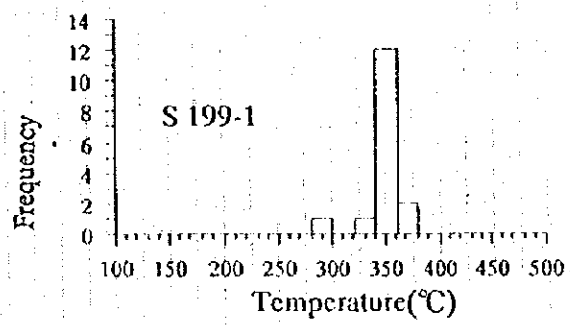
S. Imbak Sub-area South











Appendix 2

List of rock geochemical samples in S. Imbak Sub-area South

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50.000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
1	SM301	1451.83	4679.29	Gunung Kuli	Sandstone	N2Tj	weathered	brwonish, fine-grained
2	SM302	1451.69	4679.73	Gunung Kuli	Sandstone	N2Tj	weathered	light gray, fine-grained
3	SM303	1451.45	4679.33	Gunung Kuli	Sandstone	N2Tj	weathered	brownish, fine-grained
4	SM304	1451.47	4679.85	Gunung Kuli	Sandstone	N2Tj	-	yellowish gray, fine-grained
5	SM305	1451.05	4679.21	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
6	SM306	1451.19	4679.84	Gunung Kuli	Mudstone	N2Tj	-	dark gray
7	SM307	1451.82	4680.21	Gunung Kuli	Sandstone	N2Tj	-	dark gray, fine-grained
8	SM308	1451.79	4680.44	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
9	SM309	1451.62	4680.89	Gunung Kuli	Sandstone	N2Tj	-	light gray, fine-grained
10	SM310	1451.58	4680.24	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
11	SM311	1451.39	4680.58	Gunung Kuli	Diorite porphyry	II	-	gray
12	SM312	1451.42	4680.85	Gunung Kuli	Sandstone	N2Tj	-	light gray, fine-grained
13	SM313	1451.10	4680.29	Gunung Kuli	Sandstone	N2Tj	-	yellowish gray, fine-grained
14	SM314	1451.82	4681.40	Gunung Kuli	Sandstone	N2Tj	-	gray
15	SM315	1451.99	4681.53	Gunung Kuli	Sandstone	N2Tj	weak silicified, limomite dism.	gray
16	SM316	1451.88	4682.01	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism. & veinlet	gray
17	SM317	1451.75	4681.56	Gunung Kuli	Sandstone	N2Tj	silicified	gray
18	SM318	1451.37	4681.30	Gunung Kuli	Sandstone	N2Tj	-	brownish, fine-grained
19	SM319	1451.09	4680.97	Gunung Kuli	Sandstone	N2Tj	silicified, Py along bedding & vein	gray
20	SM320	1451.04	4681.27	Gunung Kuli	Conglomerate	N2Tj	-	brownish

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
21	SM321	1451.13	4681.63	Gunung Kuli	Sandstone	N2Tj	-	light gray, fine-grained
22	SM322	1451.07	4681.79	Gunung Kuli	Sandstone	N2Tj	-	light gray, fine-grained
23	SM323	1451.99	4682.36	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	light gray, fine-grained
24	SM324	1451.94	4682.73	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	light gray, fine-grained
25	SM325	1451.56	4682.31	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	whitish gray, medium-grained
26	SM326	1451.55	4682.03	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	light gray, fine-grained
27	SM327	1451.42	4682.16	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism. & vein	light gray, fine-grained
28	SM328	1451.81	4683.15	Gunung Kuli	Mudstone	N2Tj	silicified, Py dism. & vein	gray
29	SM329	1452.01	4683.56	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	gray
30	SM330	1451.64	4683.82	Gunung Kuli	Sandstone	N2Tj	Py dism.	gray
31	SM331	1451.65	4683.59	Gunung Kuli	Diorite porphyry	I1	Py dism.	gray
32	SM332	1451.60	4683.08	Gunung Kuli	Sandstone	N2Tj	weak Py dism.	gray
33	SM333	1451.35	4683.02	Gunung Kuli	Sandstone	N2Tj	silicified	gray, weathered
34	SM334	1451.19	4683.29	Gunung Kuli	Mudstone	N2Tj	silicified, weak Py dism.	gray
35	SM335	1451.28	4683.86	Gunung Kuli	Sandstone	N2Tj	weak Py dism.	gray
36	SM336	1451.04	4683.50	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	dark gray
37	SM337	1451.72	4684.17	Gunung Kuli	Dioite porphyry	I1	-	gray
38	SM338	1451.60	4684.53	Gunung Kuli	Mudstone	N2Tj	Py dism.	dark gray
39	SM339	1451.96	4684.77	Gunung Kuli	Mudstone	N2Tj	-	gray
40	SM340	1451.46	4684.84	Gunung Kuli	Mudstone	N2Tj	-	gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
41	SM341	1451.43	4684.46	Gunung Kuli	Mudstone	N2Tj	-	gray
42	SM342	1451.45	4684.05	Gunung Kuli	Diorite porphyry	I1	-	gray
43	SM343	1451.29	4684.70	Gunung Kuli	Mudstone	N2Tj	silicified	gray
44	SM344	1451.18	4684.76	Gunung Kuli	Diorite porphyry	I1	silicified, argillized, weak Py	gray
45	SM345	1451.24	4684.54	Gunung Kuli	Mudstone	N2Tj	silicified, weak Py dism.	dark gray, brecciated
46	SM346	1451.19	4684.35	Gunung Kuli	Diorite porphyry	I1	argillized	white
47	SM347	1451.93	4685.21	Gunung Kuli	Mudstone	N2Tj	-	gray
48	SM348	1451.76	4685.67	Gunung Kuli	Diorite porphyry	I1	argillized	white
49	SM349	1451.43	4685.11	Gunung Kuli	Mudstone	N2Tj	-	gray
50	SM350	1451.60	4685.16	Gunung Kuli	Diorite porphyry	I1	Py dism.	gray
51	SM351	1451.48	4685.52	Gunung Kuli	Mudstone	N2Tj	-	gray
52	SM352	1450.90	4685.17	Gunung Kuli	Diorite porphyry	I1	silicified, Py dism.	gray
53	SM353	1450.84	4685.41	Gunung Kuli	Diorite porphyry	I1	Chloritized	gray green
54	SM354	1450.72	4685.65	Gunung Kuli	Mudstone	N2Tj	brecciated	dark gray
55	SM355	1450.54	4685.27	Gunung Kuli	Mudstone	N2Tj	moderate Py dism.	dark gray
56	SM356	1450.31	4685.31	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	dark gray
57	SM357	1450.73	4684.32	Gunung Kuli	Sandstone	N2Tj	silicified	gray, fine-grained
58	SM358	1450.92	4684.61	Gunung Kuli	Mudstone	N2Tj	-	dark gray
59	SM359	1450.53	4685.03	Gunung Kuli	Mudstone	N2Tj	silicified, Py dism.	gray, brecciated
60	SM360	1450.35	4684.11	Gunung Kuli	Sandstone	N2Tj	silicified	gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
61	SM361	1450.79	4683.59	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
62	SM362	1451.00	4684.06	Gunung Kuli	Diorite porphyry	I1	fresh	dark gray, fine-grained
63	SM363	1450.60	4684.06	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
64	SM364	1450.16	4683.69	Gunung Kuli	Sandstone	N2Tj	slightly silicified	gray, fine-grained
65	SM365	1450.05	4684.00	Gunung Kuli	Sandstone	N2Tj	silicified	gray, fine-grained
66	SM366	1450.74	4682.33	Gunung Kuli	Sandstone	N2Tj	silicified	gray, fine-grained
67	SM367	1450.51	4682.26	Gunung Kuli	Sandstone	N2Tj	massive, silicified, strong Py dism.	light gray, fine-grained
68	SM368	1450.56	4682.55	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	light gray, fine-grained
69	SM369	1449.77	4682.94	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
70	SM370	1450.04	4682.36	Gunung Kuli	Conglomerate	N2Tj	silicified, Py dism.	light gray
71	SM371	1450.18	4681.92	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
72	SM372	1450.73	4681.43	Gunung Kuli	Sandstone	N2Tj	silicified	light gray, fine-grained
73	SM373	1450.63	4681.64	Gunung Kuli	Mudstone	N2Tj	silicified, Py dism.	light gray
74	SM374	1450.59	4681.94	Gunung Kuli	Sandstone	N2Tj	silicified	light gray, fine-grained
75	SM375	1450.31	4682.02	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	light gray, fine-grained
76	SM376	1450.24	4681.61	Gunung Kuli	Diorite porphyry	I1	strong Py dism.	light gray, fine-grained
77	SM377	1450.47	4681.29	Gunung Kuli	Sandstone	N2Tj	slightly silicified	light gray, fine-grained
78	SM378	1450.18	4681.10	Gunung Kuli	Sandstone	N2Tj	Py dism. and veinlet	
79	SM379	1450.10	4681.48	Gunung Kuli	Sandstone	N2Tj	highly silicified, strong Py dism.	light gray
80	SM380	1450.79	4680.38	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
81	SM381	1451.02	4680.55	Gunung Kuli	Sandstone	N2Tj	-	conglomerate, gray
82	SM382	1451.05	4680.82	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	gray
83	SM383	1450.63	4680.93	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	gray, fine-grained
84	SM384	1450.48	4680.56	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
85	SM385	1450.67	4680.19	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
86	SM386	1450.26	4680.01	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
87	SM387	1450.09	4680.27	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
88	SM388	1450.05	4680.63	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	
89	SM389	1450.26	4681.00	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
90	SM390	1450.85	4679.42	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
91	SM391	1450.72	4679.93	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
92	SM392	1450.72	4679.70	Gunung Kuli	Mudstone	N2Tj	-	dark gray
93	SM393	1450.62	4679.40	Gunung Kuli	Sandstone	N2Tj	-	gray, fine grained
94	SM394	1450.33	4679.35	Gunung Kuli	Sandstone	N2Tj	-	gray, fine grained
95	SM395	1450.43	4679.72	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
96	SM396	1450.18	4679.60	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
97	SM397	1450.05	4679.37	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
98	SM398	1449.99	4679.48	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
99	SM399	1450.05	4679.90	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
100	SM400	1449.56	4679.63	Gunung Kuli	Sandstone	N2Tj	-	dark gray, fine-grained

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50.000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
101	SM401	1449.63	4679.16	Gunung Kuli	Mudstone	N2Tj	-	dark gray
102	SM402	1449.40	4679.19	Gunung Kuli	Mudstone	N2Tj	-	dark gray
103	SM403	1449.30	4679.74	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
104	SM404	1449.25	4679.96	Gunung Kuli	Mudstone	N2Tj	-	gray
105	SM405	1449.23	4679.41	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
106	SM406	1449.91	4680.16	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
107	SM407	1449.97	4680.43	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	gray, fine-grained
108	SM408	1449.94	4680.76	Gunung Kuli	Sandstone	N2Tj	Py dism.	gray, fine-grained
109	SM409	1449.64	4680.77	Gunung Kuli	Sandstone	N2Tj	weak Py dism.	gray, fine-grained
110	SM410	1449.21	4680.24	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
111	SM411	1449.11	4680.66	Gunung Kuli	Mudstone	N2Tj	-	dark gray
112	SM412	1449.43	4680.86	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	gray
113	SM413	1448.97	4681.22	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
114	SM414	1449.05	4680.96	Gunung Kuli	Mudstone	N2Tj	silicified	dark gray
115	SM415	1449.83	4681.17	Gunung Kuli	Sandstone	N2Tj	silicified, rich Py dism.	gray
116	SM416	1449.85	4681.43	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	light gray
117	SM417	1449.93	4681.70	Gunung Kuli	Sandstone	N2Tj	weak Py dism.	light gray
118	SM418	1449.54	4681.08	Gunung Kuli	Sandstone	N2Tj	silicified	gray
119	SM419	1449.40	4681.41	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	light gray
120	SM420	1449.58	4681.81	Gunung Kuli	Sandstone	N2Tj	silicified, limonite dism.	light gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
121	SM421	1449.16	4681.69	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
122	SM422	1449.04	4681.39	Gunung Kuli	Sandstone	N2Tj	-	gray
123	SM423	1449.20	4681.21	Gunung Kuli	Diorite porphyry	I1	weak argillized, Py dism.	gray
124	SM424	1449.88	4681.99	Gunung Kuli	Conglomerate	N2Tj	silicified, Py dism.	light gray
125	SM425	1449.82	4682.23	Gunung Kuli	Sandatone	N2Tj	silicified, limonite dism.	light gray
126	SM426	1449.93	4682.77	Gunung Kuli	Conglomerate	N2Tj	silicified, Py lens	light gray
127	SM427	1449.73	4682.54	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
128	SM428	1449.54	4682.91	Gunung Kuli	Sandstone	N2Tj	silicified	light gray
129	SM429	1449.18	4682.73	Gunung Kuli	Sandstone	N2Tj	-	gray
130	SM430	1449.09	4682.43	Gunung Kuli	Diorite porphyry	I1	-	bluish gray
131	SM431	1449.36	4683.97	Gunung Kuli	Mudstone	N2Tj	Py dism.	gray
132	SM432	1449.13	4683.02	Gunung Kuli	Mudstone	N2Tj	-	dark gray
133	SM433	1449.92	4684.37	Gunung Kuli	Mudstone	N2Tj	-	dark gray
134	SM434	1449.74	4684.59	Gunung Kuli	Mudstone	N2Tj	silicified, Py along cracks	dark gray
135	SM435	1449.60	4684.82	Gunung Kuli	Mudstone	N2Tj	-	dark gray
136	SM436	1449.52	4684.42	Gunung Kuli	Sandstone	N2Tj	silicified	light gray, fine-grained
137	SM437	1449.50	4684.12	Gunung Kuli	Sandstone	N2Tj	Py dism. & veinlet	gray, fine-grained
138	SM438	1449.16	4684.25	Gunung Kuli	Sandstone	N2Tj	weak Py dism.	gray, fine-grained
139	SM439	1449.04	4684.78	Gunung Kuli	Sandstone	N2Tj	Py dism. & veinlet, silicified	gray, fine-grained
140	SM440	1450.03	4685.35	Gunung Kuli	Diorite porphyry	I1	fresh	greenish

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50.000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
141	SM441	1449.64	4685.46	Gunung Kuli	Mudstone	N2Tj	-	dark gray
142	SM442	1449.30	4685.95	Gunung Kuli	Diorite porphyry	I1	weak Py and malachite, silicified	white
143	SM443	1449.41	4685.30	Gunung Kuli	Mudstone	N2Tj	-	dark gray
144	SM444	1449.40	4685.06	Gunung Kuli	Sandstone	N2Tj	silicified	light gray, fine-grained
145	SM445	1449.08	4685.07	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	dark gray
146	SM446	1449.05	4685.59	Gunung Kuli	Mudstone	N2Tj	-	dark gray
147	SM447	1448.84	4685.39	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	dark gray
148	SM448	1448.56	4685.32	Gunung Kuli	Mudstone	N2Tj	Py veinlet, silicified	dark gray
149	SM449	1448.33	4685.19	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	dark gray
150	SM450	1448.33	4685.63	Gunung Kuli	Mudstone	N2Tj	-	gray, slightly weathered
151	SM451	1449.01	4684.40	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	gray
152	SM452	1448.91	4684.12	Gunung Kuli	Sandstone	N2Tj	-	gray
153	SM453	1448.47	4684.92	Gunung Kuli	Mud- and sandstone	N2Tj	Py dism. & film	gray
154	SM454	1448.29	4684.66	Gunung Kuli	Sandstone	N2Tj	Py dism., silicified	gray
155	SM455	1448.07	4684.23	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	gray
156	SM456	1448.84	4683.82	Gunung Kuli	Sandstone	N2Tj	-	gray
157	SM457	1448.22	4683.10	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	light gray
158	SM458	1448.94	4682.29	Gunung Kuli	Sandstone	N2Tj	-	light gray
159	SM459	1449.48	4682.16	Gunung Kuli	Sandstone	N2Tj	silicified	light gray(weathered)
160	SM460	1449.53	4682.54	Gunung Kuli	Sandstone	N2Tj	silicified	light gray(weathered)

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
161	SM461	1448.53	4682.39	Gunung Kuli	Sandstone	N2Tj	slightly silicified along crack	light gray
162	SM462	1448.29	4682.68	Gunung Kuli	Sandstone	N2Tj	silicified	gray, fine-grained
163	SM463	1448.12	4682.27	Gunung Kuli	Mudstone	N2Tj	-	gray
164	SM464	1448.96	4682.06	Gunung Kuli	Sandstone	N2Tj	-	gray
165	SM465	1448.71	4681.75	Gunung Kuli	Mudstone	N2Tj	minor Py dism.	light gray
166	SM466	1448.86	4681.57	Gunung Kuli	Mudstone	N2Tj	minor Py dism.	gray
167	SM467	1447.02	4683.00	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
168	SM468	1448.45	4681.23	Gunung Kuli	Mudstone	N2Tj	-	dark gray
169	SM469	1448.44	4681.93	Gunung Kuli	Sandstone	N2Tj	silicified with Py dism.	light gray, fine-grained
170	SM470	1448.11	4681.52	Gunung Kuli	Sandstone	N2Tj	-	dark gray, fine-grained
171	SM471	1448.15	4681.14	Gunung Kuli	Mudstone	N2Tj	Py dism.	dark gray
172	SM472	1448.81	4680.11	Gunung Kuli	Mudstone	N2Tj	-	dark gray
173	SM473	1448.52	4680.87	Gunung Kuli	Mudstone	N2Tj	-	dark gray
174	SM474	1448.46	4680.33	Gunung Kuli	Mudstone	N2Tj	-	dark gray
175	SM475	1448.32	4680.58	Gunung Kuli	Mudstone	N2Tj	-	dark gray
176	SM476	1448.25	4680.83	Gunung Kuli	Mudstone	N2Tj	-	dark gray
177	SM477	1448.06	4680.02	Gunung Kuli	Mudstone	N2Tj	-	dark gray
178	SM478	1448.62	4679.78	Gunung Kuli	Mudstone	N2Tj	-	dark gray
179	SM479	1448.56	4680.05	Gunung Kuli	Mudstone	N2Tj	-	dark gray
180	SM480	1448.46	4679.49	Gunung Kuli	Diorite porphyry	I1	-	gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
181	SM481	1448.27	4679.18	Gunung Kuli	Mudstone	N2Tj	-	gray
182	SM482	1448.03	4679.45	Gunung Kuli	Mudstone	N2Tj	-	gray
183	SM483	1448.24	4679.77	Gunung Kuli	Mudstone	N2Tj	-	dark gray
184	SM484	1447.86	4679.59	Gunung Kuli	Mudstone	N2Tj	-	dark gray
185	SM485	1447.61	4679.16	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	dark gray
186	SM486	1447.42	4679.66	Gunung Kuli	Mudstone	N2Tj	-	gray
187	SM487	1447.30	4679.62	Gunung Kuli	Mudstone	N2Tj	-	gray
188	SM488	1447.14	4679.51	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
189	SM489	1447.94	4680.19	Gunung Kuli	Mudstone	N2Tj	-	dark gray
190	SM490	1447.82	4680.38	Gunung Kuli	Mudstone	N2Tj	-	dark gray
191	SM491	1447.65	4680.65	Gunung Kuli	Mudstone	N2Tj	-	dark gray
192	SM492	1447.32	4680.93	Gunung Kuli	Mudstone	N2Tj	silicified, weak Py dism.	dark gray
193	SM493	1447.37	4680.70	Gunung Kuli	Diorite porphyry	I1	-	gray
194	SM494	1447.19	4680.75	Gunung Kuli	Mudstone	N2Tj	silicified, Py dism.	dark gray
195	SM495	1447.86	4681.16	Gunung Kuli	Diorite porphyry	I1	Py dism.	
196	SM496	1447.83	4681.49	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
197	SM497	1447.87	4681.87	Gunung Kuli	Sandstone	N2Tj	silicified, rich Py dism.	gray, fine-grained
198	SM498	1447.76	4681.71	Gunung Kuli	Sandstone	N2Tj	Py dism, and sheard	gray, fine-grained
199	SM499	1447.54	4681.36	Gunung Kuli	mudstone	N2Tj	-	dark gray
200	SM500	1447.47	4681.04	Gunung Kuli	mudstone	N2Tj	silicified	dark gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
201	SM501	1447.29	4681.20	Gunung Kuli	Mudstone	N2Tj	-	dark gray
202	SM502	1447.08	4681.49	Gunung Kuli	Mudstone	N2Tj	-	dark gray
203	SM503	1448.03	4682.35	Gunung Kuli	Mudstone	N2Tj	minor Py dism.	gray
204	SM504	1447.90	4682.85	Gunung Kuli	Sandstone	N2Tj	silicified with Py dism.	light gray, fine-grained
205	SM505	1447.91	4682.12	Gunung Kuli	Sandstone	N2Tj	silicified	gray, fine-grained
206	SM506	1447.59	4682.84	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	light gray
207	SM507	1447.49	4682.26	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	gray, fine-grained
208	SM508	1447.45	4681.93	Gunung Kuli	Mudstone	N2Tj	silicified	dark gray
209	SM509	1447.42	4682.50	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	light gray
210	SM510	1446.82	4682.76	Gunung Kuli	Sandstone	N2Tj	silicified	gray
211	SM511	1447.17	4682.68	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism. and sheard	light gray
212	SM512	1447.72	4683.34	Gunung Kuli	Sandstone	N2Tj	silicified, Py dism.	light gray
213	SM513	1447.63	4683.09	Gunung Kuli	Mudstone	N2Tj	silicified, weak Py dism.	dark gray
214	SM514	1447.48	4683.85	Gunung Kuli	Sandstone	N2Tj	weathered	gray, fine-grained
215	SM515	1447.18	4683.86	Gunung Kuli	Sandstone	N2Tj	weathered	brownish, fine-grained
216	SM516	1447.13	4683.61	Gunung Kuli	Sandstone	N2Tj	sheard, hard	dark gray, fine-grained
217	SM517	1448.08	4684.69	Gunung Kuli	Sandstone	N2Tj	silicified	gray
218	SM518	1447.79	4684.25	Gunung Kuli	Diorite porphyry	Ij	weak chloritization, Py dism.	gray
219	SM519	1447.88	4684.60	Gunung Kuli	Sandstone	N2Tj	silicified, weak Py dism.	gray
220	SM520	1447.72	4684.97	Gunung Kuli	Mudstone	N2Tj	Py dism.	dark gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
221	SM521	1447.55	4684.71	Gunung Kuli	Sandstone	N2Tj	Py dism. along bedding	gray, medium-grained
222	SM522	1447.69	4685.17	Gunung Kuli	Mudstone	N2Tj	Py dism.	gray
223	SM523	1447.63	4685.89	Gunung Kuli	Sandstone	N2Tj	-	light gray, medium-graimed
224	SM524	1447.65	4685.51	Gunung Kuli	Mudstone	N2Tj	-	gray
225	SM525	1447.51	4685.14	Gunung Kuli	Sandstone	N2Tj	-	light gray, medium-grained
226	SM526	1447.30	4685.65	Gunung Kuli	Mudstone	N2Tj	-	gray
227	SM527	1447.69	4685.40	Gunung Kuli	Diorite porphyry	I1	Py dism.	
228	SM528	1446.71	4685.51	Gunung Kuli	Mudstone	N2Tj	-	gray
229	SM529	1445.83	4685.81	Gunung Kuli	Mudstone	N2Tj	-	gray
230	SM530	1446.81	4684.20	Gunung Kuli	Sandstone	N2Tj	-	light gray, medim-grained
231	SM531	1446.19	4684.06	Gunung Kuli	Sandstone	N2Tj	silicified	light gray, fine-grained
232	SM532	1446.86	4683.04	Gunung Kuli	Diorite porphyry	I1	weathered	gray
233	SM533	1446.82	4683.60	Gunung Kuli	Diorite porphyry	I1	weathered	brownish green
234	SM534	1446.86	4683.80	Gunung Kuli	Sandstone	N2Tj	weathered	brown, fine-grained
235	SM535	1446.55	4683.78	Gunung Kuli	Sandstone	N2Tj	Py along shear	dark gray, fine-grained
236	SM536	1446.50	4683.22	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
237	SM537	1446.26	4683.31	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
238	SM538	1446.75	4682.47	Gunung Kuli	Mudstone	N2Tj	silicified, Py-Cp dism. & film	light gray
239	SM539	1446.53	4681.97	Gunung Kuli	Mudstone	N2Tj	silicified, Py-Cp dism. & film	light gray
240	SM540	1446.59	4682.13	Gunung Kuli	Mudstone	N2Tj	silicified, Py-Cp dism. & film	light gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50.000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
241	SM541	1446.18	4682.19	Gunung Kuli	Mudstone	N2Tj	-	dark gray
242	SM542	1446.32	4682.86	Gunung Kuli	Mudstone	N2Tj	weathered	brownish
243	SM543	1446.95	4681.96	Gunung Kuli	Mudstone	N2Tj	silicified, weathered	brown
244	SM544	1446.84	4681.70	Gunung Kuli	Mudstone	N2Tj	silicified, limonite dism.	brown
245	SM545	1446.43	4681.67	Gunung Kuli	Mudstone	N2Tj	silicified, Py-Cp dism. & film	light gray
246	SM546	1446.48	4681.47	Gunung Kuli	Mudstone	N2Tj	silicified, Py dism. & film	light gray
247	SM547	1446.49	4681.24	Gunung Kuli	Sandstone	N2Tj	-	dark gray
248	SM548	1446.79	4681.27	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	dark gray
249	SM549	1446.24	4681.82	Gunung Kuli	Mudstone	N2Tj	silicified, Py dism. & film	light gray
250	SM550	1446.92	4680.09	Gunung Kuli	Sandstone	N2Tj	-	gray
251	SM551	1447.04	4680.42	Gunung Kuli	Diorite porphyry	I1	-	gray
252	SM552	1446.84	4680.92	Gunung Kuli	Mudstone	N2Tj	-	dark gray
253	SM553	1446.62	4680.48	Gunung Kuli	Mudstone	N2Tj	-	dark gray
254	SM554	1446.41	4680.79	Gunung Kuli	Mudstone	N2Tj	-	dark gray
255	SM555	1446.39	4681.03	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	dark gray
256	SM556	1446.27	4680.38	Gunung Kuli	Sandstone	N2Tj	silicified	light gray, coarse-grained
257	SM557	1446.15	4680.16	Gunung Kuli	Mudstone	N2Tj	-	gray
258	SM558	1446.02	4680.80	Gunung Kuli	Mudstone	N2Tj	-	dark gray
259	SM559	1446.90	4679.26	Gunung Kuli	Mudstone	N2Tj	-	gray
260	SM560	1446.78	4679.12	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained

Ser. No.	Sample No.	Coordinates N	E	1/50.000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
261	SM561	1446.68	4679.93	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
262	SM562	1446.52	4679.62	Gunung Kuli	Sand- and Mudstone	N2Tj	-	gray, fine-grained
263	SM563	1445.99	4679.42	Gunung Kuli	Mudstone	N2Tj	-	gray
264	SM564	1445.93	4679.87	Gunung Kuli	Mudstone	N2Tj	-	gray
265	SM565	1445.65	4679.64	Gunung Kuli	Mudstone	N2Tj	-	gray
266	SM566	1445.78	4679.16	Gunung Kuli	Mudstone	N2Tj	-	gray
267	SM567	1445.21	4679.54	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	gray
268	SM568	1445.46	4679.99	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	gray
269	SM569	1445.06	4679.22	Gunung Kuli	Mudstone	N2Tj	weak Py dism.	gray
270	SM570	1445.70	4680.20	Gunung Kuli	Mudstone	N2Tj	-	gray
271	SM571	1445.65	4680.47	Gunung Kuli	Mudstone	N2Tj	-	dark gray
272	SM572	1445.44	4680.34	Gunung Kuli	Mudstone	N2Tj	-	dark gray
273	SM573	1445.07	4680.02	Gunung Kuli	Mudstone	N2Tj	-	dark gray
274	SM574	1445.29	4680.88	Gunung Kuli	Sandstone	N2Tj	-	gray
275	SM575	1445.12	4680.87	Gunung Kuli	Mudstone	N2Tj	-	dark gray
276	SM576	1445.46	4681.50	Gunung Kuli	Mudstone	N2Tj	weathered	brown
277	SM577	1445.54	4681.00	Gunung Kuli	Mudstone	N2Tj	-	dark gray
278	SM578	1445.35	4681.39	Gunung Kuli	Mudstone	N2Tj	-	dark gray
279	SM579	1445.21	4681.10	Gunung Kuli	Mudstone	N2Tj	weak silicified	dark gray
280	SM580	1445.68	4682.05	Gunung Kuli	Mudstone	N2Tj	-	gray

Area: S. Imbak Sub-area South

Ser. No.	Sample No.	Coordinates N	E	1/50,000 Topo. Sheet	Rock Name	Geol. Unit	Alteration/Mineralization	Description
281	SM581	1445.90	4682.95	Gunung Kuli	Sandstone	N2Tj	-	dark gray, fine-grained
282	SM582	1445.56	4682.28	Gunung Kuli	Mudstone	N2Tj	silicified with Py dism.	dark gray
283	SM583	1445.58	4683.14	Gunung Kuli	Mudstone	N2Tj	-	dark gray
284	SM584	1445.27	4682.80	Gunung Kuli	Diorite porphyry	I1	weathered	brownish gray
285	SM585	1445.31	4682.32	Gunung Kuli	Diorite porphyry	I1	weak Py dism.	
286	SM586	1445.43	4682.04	Gunung Kuli	Sandstone	N2Tj	-	gray, fine-grained
287	SM587	1445.73	4683.66	Gunung Kuli	Sandstone	N2Tj	silicified	dark gray, fine-grained
288	SM588	1445.77	4683.31	Gunung Kuli	Sandstone	N2Tj	weathered	brownish, fine-grained
289	SM589	1445.69	4683.78	Gunung Kuli	Sandstone	N2Tj	-	light gray, fine-grained
290	SM590	1445.21	4683.91	Gunung Kuli	Diorite porphyry	I1	chloritized, Py dism.	green
291	SM591	1445.34	4683.34	Gunung Kuli	Sandstone	N2Tj	weathered	gray, fine-grained
292	SM592	1445.87	4684.08	Gunung Kuli	Sandstone	N2Tj	-	light gray, fine-grained
293	SM593	1445.38	4684.21	Gunung Kuli	Sandstone	N2Tj	-	light gray, fine-grained
294	SM594	1445.95	4685.00	Gunung Kuli	Mudstone	N2Tj	weathered	dark gray
295	SM595	1445.93	4685.12	Gunung Kuli	Diorite Porphyry	I1		dark gray
296	SM596	1445.89	4685.43	Gunung Kuli	Mudstone	N2Tj	sheared, brecciated	dark gray
297	SM597	1445.78	4685.85	Gunung Kuli	Mudstone	N2Tj	-	dark gray
298	SM598	1445.47	4685.45	Gunung Kuli	Mudstone	N2Tj	brecciated	dark gray
299	SM599	1445.28	4685.12	Gunung Kuli	Mudstone	N2Tj	-	dark gray
300	SM600	1445.21	4685.73	Gunung Kuli	Mudstone	N2Tj	brecciated	dark gray

Appendix 3

Analytical results of rock geochemical samples in S. Imbak Sub-area South

List of Geochemical Analysis(1)

Ser. No.	Sample No.	Location(km) X-coord	Y-coord	Ag ppm	As ppm	Au ppb	Ca %	Cu ppm	Hg ppb	K %	Mg %	Na %	Pb ppm	Rb ppm	S %	Sb ppm	Sr ppm	Zn ppm
1	SM301	4679.293	1451.827	.05	1	1>	.01	26	66	.71	.44	.11	12	70	.013	1.8	33	84
2	SM302	4679.728	1451.692	.16	1>	1>	.03	7	22	.57	.20	.18	6	55	.008	1.0	33	22
3	SM303	4679.333	1451.451	.04	1	1>	.01	13	10>	.63	.39	.12	10	61	.012	1.9	28	68
4	SM304	4679.845	1451.466	.09	1>	1>	.05	11	24	.56	.40	.69	15	56	.011	7.2	57	55
5	SM305	4679.208	1451.052	.30	1>	1>	.07	13	34	.46	.40	.79	13	47	.019	6.2	64	47
6	SM306	4679.842	1451.185	.02>	1>	1	.23	25	46	1.45	1.15	1.01	18	162	.264	8.6	77	79
7	SM307	4680.208	1451.824	.03	1>	1>	.01>	4	20	.11	.01	.05	2	6	.019	4.0	14	6
8	SM308	4680.440	1451.787	.02>	1>	1>	.01>	4	39	.22	.05	.06	3	20	.012	7.0	25	9
9	SM309	4680.895	1451.619	.02>	7	1>	.01>	9	25	.68	.09	.07	15	116	.008	2.3	7	14
10	SM310	4680.227	1451.581	.02>	8	1>	.01>	13	54	.50	.15	.17	16	58	.460	7.0	27	20
11	SM311	4680.584	1451.388	.18	1>	1>	4.06	55	38	2.03	1.76	2.07	35	224	.094	10.8	608	78
12	SM312	4680.852	1451.421	.02>	17	1>	.02	3	21	.63	.16	.08	101	82	.012	8.0	14	14
13	SM313	4680.292	1451.102	.45	1>	1>	.01>	4	23	.27	.07	.05	2>	33	.015	16.6	8	11
14	SM314	4681.397	1451.822	.02>	13	3	.01>	5	28	.55	.10	.09	6	71	.013	10.8	20	13
15	SM315	4681.529	1451.993	.24	28	11	.01>	14	17	.54	.07	.11	32	78	.016	8.8	12	15
16	SM316	4682.009	1451.885	1.49	46	1>	.01>	88	38	1.82	.51	.16	55	289	.462	3.9	12	44
17	SM317	4681.557	1451.752	.02	20	1>	.01>	8	23	.44	.10	.08	16	76	.012	14.5	9	9
18	SM318	4681.297	1451.368	.14	4	1>	.01>	10	56	.40	.08	.06	4	59	.013	7.8	10	18
19	SM319	4680.970	1451.087	4.71	1682	502	.01	30	100	.42	.10	.06	55	81	15.708	34.7	7	25
20	SM320	4681.272	1451.040	.54	261	19	.01>	16	43	.29	.04	.05	123	36	.124	38.8	16	13
21	SM321	4681.624	1451.127	.06	42	4	.01>	27	27	.24	.05	.06	3	36	.015	9.0	3	17
22	SM322	4681.792	1451.070	.12	9	1>	.01>	13	32	.30	.10	.07	4	39	.011	8.0	8	21
23	SM323	4682.361	1451.985	3.32	44	10	.01>	25	57	.97	.18	.11	142	160	.200	7.3	19	13
24	SM324	4682.729	1451.937	.33	18	4	.01	18	30	.79	.16	.63	15	100	.395	5.3	49	24
25	SM325	4682.314	1451.559	.16	109	8	.01>	6	735	.78	.17	.07	102	140	.010	9.3	8	14
26	SM326	4682.026	1451.554	2.08	96	7	.01>	60	327	1.11	.44	.10	54	182	.403	12.9	20	38
27	SM327	4682.157	1451.423	1.60	223	172	.01>	49	93	.86	.17	.09	147	173	1.669	16.8	9	48
28	SM328	4683.151	1451.812	.02>	8	1>	.03	32	38	1.22	.97	.69	13	186	.093	6.5	55	87
29	SM329	4683.563	1452.010	.02>	25	1>	.01>	12	33	.52	.21	.48	6	73	.018	2.6	29	52
30	SM330	4683.815	1451.644	.23	12	1>	.03	22	44	.65	.58	.29	16	117	.110	7.9	21	52
31	SM331	4683.590	1451.651	.29	1>	3	3.00	74	10>	1.79	2.19	1.78	20	189	.309	20.0	552	86
32	SM332	4683.076	1451.599	.18	14	2	.06	13	25	.67	.72	.70	19	106	.071	7.8	53	56
33	SM333	4682.023	1451.246	.02>	230	41	.01>	17	292	.57	.22	.09	91	138	.022	22.4	16	19
34	SM334	4683.293	1451.190	.02>	1>	1>	.11	26	15	.90	.99	.82	15	153	.247	11.9	75	57
35	SM335	4683.858	1451.280	.02	20	1>	.11	14	23	.60	.56	.48	13	123	.167	7.4	42	43
36	SM336	4683.499	1451.042	.52	12	1>	.08	17	12	.52	.82	.64	13	112	.273	9.5	55	87
37	SM337	4684.173	1451.724	.02>	1>	1>	3.48	54	27	1.36	1.51	1.46	37	252	.032	14.7	484	100
38	SM338	4684.533	1451.604	.04	1>	1>	.17	66	75	.22	1.72	.39	25	55	.813	18.2	44	157
39	SM339	4684.768	1451.965	.02>	1>	1>	.02	18	37	1.06	.45	.32	30	235	.033	5.3	62	55
40	SM340	4684.840	1451.461	.45	38	1>	.03	24	37	1.07	.38	.27	32	227	.009	5.0	103	40
41	SM341	4684.460	1451.426	.23	45	14	.01>	107	56	.27	.08	.06	16	41	.034	30.7	11	139
42	SM342	4684.052	1451.451	.15	1>	3	3.50	50	10>	1.37	1.58	1.65	40	227	.033	10.7	546	98
43	SM343	4684.697	1451.293	.02>	1>	1>	.12	20	66	.66	.86	.61	31	141	.143	13.1	60	87
44	SM344	4684.755	1451.178	.02>	1>	1>	3.07	65	15	.34	1.86	1.91	41	43	.391	14.9	893	56
45	SM345	4684.542	1451.243	.02>	1>	10	.17	53	28	.18	1.63	.24	30	21	.950	19.4	31	129
46	SM346	4684.353	1451.193	.15	15	1>	.19	21	48	.45	.37	2.40	37	64	.021	5.2	419	56
47	SM347	4685.205	1451.935	.02>	1>	1>	.15	30	65	.75	1.17	.46	37	210	.325	12.1	56	114
48	SM348	4685.669	1451.757	.06	1>	1>	.25	22	1440	.44	.27	1.78	28	67	.014	5.9	288	84
49	SM349	4685.112	1451.428	.02>	1>	1	.06	25	118	.73	.81	.51	28	176	.053	4.6	52	79
50	SM350	4685.162	1451.601	.22	1>	1>	3.60	84	65	.94	2.82	1.19	39	223	.053	17.0	461	114

List of Geochemical Analysis(2)

Ser. No.	Sample No.	Location(km) X-coord	Y-coord	Ag ppm	As ppm	Au ppb	Ca %	Cu ppm	Hg ppb	K %	Mg %	Na %	Pb ppm	Rb ppm	S %	Sb ppm	Sr ppm	Zn ppm
51	SM351	4685.520	1451.476	.02>	18	2	.13	19	86	.75	1.06	.49	37	189	.107	8.9	71	88
52	SM352	4685.170	1450.904	.02>	1>	1>	3.87	56	16	.62	1.77	1.41	43	179	.146	22.7	685	71
53	SM353	4685.410	1450.839	.07	1>	1>	4.21	45	21	.99	1.85	1.65	29	159	.058	10.0	728	79
54	SM354	4685.654	1450.721	.02>	107	6	.11	53	603	.14	.28	.06	156	36	29.355	179.7	40	67
55	SM355	4685.265	1450.536	.02>	1>	9	.18	11	95	.58	.73	.36	38	152	3.722	19.8	86	77
56	SM356	4685.313	1450.308	.02>	1>	2	1.08	53	83	.14	3.04	.12	6	18	.555	29.3	69	103
57	SM357	4684.315	1450.731	.05	18	1>	.02	11	36	.54	.22	.23	28	140	.029	20.2	26	33
58	SM358	4684.605	1450.922	.02>	1>	1>	.01	28	20	.42	1.15	.12	27	88	.017	12.4	25	124
59	SM359	4685.030	1450.526	.02>	2	1>	.11	25	35	.76	.72	.17	33	222	.325	6.0	149	53
60	SM360	4684.110	1450.350	.02>	1>	1>	.18	15	16	.21	.98	.50	17	35	.124	11.5	56	62
61	SM361	4683.592	1450.786	.06	3	1>	.06	50	25	.45	.37	.12	18	165	.368	7.7	17	33
62	SM362	4684.061	1451.000	.25	1>	1>	4.91	82	18	.88	3.06	1.01	28	177	.097	11.2	364	150
63	SM363	4684.063	1450.601	.13	1>	1>	.01	3	11	.12	.03	.05	10	14	.013	5.1	6	10
64	SM364	4683.686	1450.160	.02>	14	1>	.03	12	10>	.36	.43	.53	21	86	.147	7.8	54	133
65	SM365	4684.003	1450.054	.09	7	1>	.05	11	17	.35	.46	.55	15	71	.034	7.6	47	47
66	SM366	4682.234	1450.739	5.11	19	27	.01>	652	17	.38	.30	.11	56	89	3.295	15.0	13	31
67	SM367	4682.256	1450.511	3.02	13	11	.01>	315	10>	.30	.19	.08	22	130	.974	6.8	7	17
68	SM368	4682.546	1450.561	1.73	1>	4	.01>	1752	33	.25	.25	.09	22	77	2.154	10.0	13	77
69	SM369	4682.936	1449.769	.02>	52	7	.01>	17	27	.14	.02	.04	10	20	.018	22.0	5	12
70	SM370	4682.356	1450.037	.02>	34	1>	.01>	10	30	.10	.03	.05	3	6	.012	7.5	6	6
71	SM371	4681.924	1450.177	.02>	80	3	.01>	73	21	.21	.11	.06	21	123	.019	6.6	3	14
72	SM372	4681.432	1450.731	10.27	18	1>	.01>	2223	12	.21	.05	.05	8	62	.419	11.5	3	38
73	SM373	4681.637	1450.629	1.98	134	138	.01>	1966	30	.79	.46	.12	28	335	1.973	112.5	17	46
74	SM374	4681.939	1450.586	9.09	376	2400	.01>	1569	25	.18	.15	.05	44	60	3.102	245.2	4	87
75	SM375	4682.024	1450.308	1.24	12	16	.01>	85	37	.26	.14	.07	26	105	.934	12.6	5	12
76	SM276	4681.614	1450.238	.40	1>	8	3.97	197	18	.71	1.87	1.08	33	200	1.361	16.4	484	65
77	SM377	4681.294	1450.471	.02>	1>	2	.01>	22	17	.20	.05	.05	2>	59	.023	6.3	4	9
78	SM378	4681.102	1450.185	.19	191	6	.01>	296	14	.22	.03	.05	7	47	.169	7.5	5	19
79	SM279	4681.479	1450.105	.49	345	1	.01>	149	33	.25	.06	.05	33	68	.146	6.9	6	21
80	SM380	4680.377	1450.794	1.17	67	42	.02	14	27	.19	.24	.05	38	45	1.700	20.6	18	60
81	SM281	4680.555	1451.020	.02	3	1>	.01>	13	19	.34	.25	.06	15	30	.051	5.7	23	23
82	SM382	4680.817	1451.052	.03	28	6	.01>	15	36	.73	.22	.08	3	100	.085	5.3	12	22
83	SM283	4680.927	1450.631	.40	51	1	.01>	74	18	.24	.02	.05	11	24	.490	5.6	11	11
84	SM384	4680.557	1450.476	.02>	1>	2	.01>	3	19	.08	.01>	.04	2>	1	.013	1.5	3	5
85	SM385	4680.188	1450.666	.07	1>	1>	.39	11	20	.58	.49	.79	13	61	.030	7.3	67	52
86	SM386	4680.007	1450.260	.07	3	1>	.09	12	20	.58	.62	.79	11	64	.065	7.8	48	61
87	SM387	4680.270	1450.089	.31	1>	1>	.15	13	11	.55	.88	.56	15	61	.118	11.4	28	95
88	SM388	4680.634	1450.049	.24	1>	1>	.01	20	10>	.57	.35	.23	12	73	.522	5.3	15	67
89	SM389	4681.002	1450.262	2.47	66	9	.01>	520	10>	.46	.04	.07	10	66	.643	7.1	4	16
90	SM390	4679.418	1450.854	.02>	1>	1>	.03	19	27	.73	.48	.80	14	77	.016	5.6	75	44
91	SM391	4679.930	1450.716	.02>	1>	1>	.94	12	18	.44	.55	.69	9	39	.044	10.6	62	46
92	SM392	4679.697	1450.716	.07	1>	1>	.36	26	28	1.13	1.19	.81	24	148	.360	8.7	89	82
93	SM393	4679.400	1450.619	.10	1>	1>	.13	15	16	.69	.67	.87	21	84	.052	5.7	80	61
94	SM394	4679.348	1450.325	.02>	1>	1>	.07	11	10>	.48	.53	.76	16	57	.016	7.4	57	49
95	SM395	4679.720	1450.428	.02>	1>	1>	.35	12	14	.50	.70	.84	15	61	.043	4.6	69	59
96	SM396	4679.600	1450.182	.05	1>	1>	.09	14	15	.34	.81	.67	11	35	.037	5.9	50	53
97	SM397	4679.368	1450.049	.02>	1>	1>	.06	13	33	.41	.57	.70	13	48	.018	7.7	54	56
98	SM398	4679.483	1449.992	.02>	1>	1>	.36	13	13	.49	.64	.82	11	53	.013	8.3	59	55
99	SM399	4679.895	1450.052	.02>	1>	1>	1.89	14	19	.16	.85	.51	10	16	.042	10.0	78	89
100	SM400	4679.625	1449.561	.02>	1>	1>	.11	15	36	.63	.66	.87	12	77	.020	5.1	65	56

List of Geochemical Analysis(3)

Ser. No.	Sample No.	Location(km) X-coord	Y-coord	Ag ppm	As ppm	Au ppb	Ca %	Cu ppm	Hg ppb	K %	Mg %	Na %	Pb ppm	Rb ppm	S %	Sb ppm	Sr ppm	Zn ppm
101	SM401	4679.161	1449.631	.02>	1>	1>	.15	32	56	1.22	1.02	.64	30	182	.466	11.5	82	100
102	SM402	4679.193	1449.400	.02>	1>	1>	.20	29	29	1.33	1.34	.73	27	179	.327	11.4	88	105
103	SM403	4679.743	1449.302	.02>	1>	1>	.26	17	10>	.54	1.06	.84	12	63	.084	10.8	63	61
104	SM404	4679.960	1449.247	.02>	1>	1>	.21	26	16	1.01	1.17	.80	22	148	.250	10.0	70	87
105	SM405	4679.413	1449.232	.02>	1>	1>	.15	17	15	.72	.84	.87	19	89	.112	9.9	69	77
106	SM406	4680.163	1449.911	.02>	27	1>	.03	99	10>	.53	.51	.55	15	70	.014	7.4	37	69
107	SM407	4680.425	1449.969	1.20	74	6	.01>	61	10>	.44	.18	.09	34	64	.621	6.1	17	29
108	SM408	4680.759	1449.937	.23	28	1>	.04	40	10>	.94	1.00	.33	243	155	.850	11.4	23	475
109	SM409	4680.767	1449.641	.02>	1>	1>	.14	15	10>	.44	.82	.69	21	61	.091	6.4	53	111
110	SM410	4680.237	1449.207	.02>	1>	1>	.22	14	16	.54	.80	.88	10	73	.059	6.4	55	61
111	SM411	4680.654	1449.109	.02>	1>	1>	.34	35	29	1.45	1.57	.66	29	223	.402	11.6	65	103
112	SM412	4680.857	1449.430	.05	48	8	.08	15	10>	.52	.37	.10	17	79	.894	10.7	23	37
113	SM413	4681.220	1448.971	.02>	1>	1>	.02	11	21	.47	.48	.62	17	54	.051	6.5	43	51
114	SM414	4680.955	1449.052	.02>	1>	1>	.13	27	29	.85	1.01	.91	24	120	.226	4.5	65	108
115	SM415	4681.169	1449.831	.72	12	1	.01>	119	10>	.70	.41	.11	26	130	.604	4.4	11	1103
116	SM416	4681.427	1449.846	.87	317	18	.01>	102	23	.66	.18	.08	225	126	.094	7.4	15	48
117	SM417	4681.704	1449.929	.73	35	12	.01>	67	10>	.53	.14	.07	45	114	.200	6.4	3	12
118	SM418	4681.077	1449.543	.06	18	2	.01>	41	14	.51	.47	.06	12	89	.386	11.2	6	55
119	SM419	4681.410	1449.403	.61	14	4	.02	199	12	.63	.55	.61	12	112	.152	3.7	57	33
120	SM420	4681.809	1449.583	.02>	25	1>	.01>	48	17	.33	.05	.06	5	45	.013	8.0	4	10
121	SM421	4681.687	1449.157	.02>	13	4	.21	12	10>	.54	.38	.24	58	94	.224	28.1	23	65
122	SM422	4681.392	1449.042	.02>	1>	1>	.12	19	13	.49	.73	.79	25	68	.110	8.0	65	69
123	SM423	4681.207	1449.197	.64	1>	1>	.64	105	10>	1.05	1.52	.79	73	188	2.568	17.6	199	66
124	SM424	4681.994	1449.876	.27	4	7	.01>	551	10>	.34	.08	.07	37	61	.422	8.0	5	57
125	SM425	4682.231	1449.816	.02>	30	1>	.01>	18	10>	.56	.13	.08	6	94	.012	8.4	8	10
126	SM426	4682.771	1449.932	.02>	1>	1>	.01>	7	20	.09	.01>	.05	3	2	.009	18.4	5	5
127	SM427	4682.541	1449.734	.02>	917	5	.01>	10	12	.50	.05	.09	14	71	.017	20.8	31	10
128	SM428	4682.911	1449.541	.02>	1>	1>	.01>	4	10>	.14	.01>	.05	3	10	.008	2.6	7	6
129	SM429	4682.729	1449.177	.02>	1>	1>	.01>	10	14	.47	.17	.13	21	71	.306	4.6	13	43
130	SM430	4682.432	1449.094	.02>	1>	1	4.66	65	14	1.38	2.03	1.60	26	176	.159	15.1	646	78
131	SM431	4683.973	1449.363	.02>	1>	1>	.12	24	30	.98	.99	.76	16	146	.374	5.7	72	92
132	SM432	4683.016	1449.134	.02>	1>	1>	.01	20	20	.27	.17	.28	7	32	.215	6.3	31	23
133	SM433	4684.371	1449.922	.02>	8	1>	.07	10	71	.75	.58	.75	12	105	.114	8.0	53	70
134	SM434	4684.590	1449.744	.02>	11	11	.01>	12	98	.66	.17	.12	11	108	1.989	30.8	44	27
135	SM435	4684.817	1449.601	.02>	22	1>	.18	3	71	1.03	1.27	.43	24	197	.329	22.7	49	71
136	SM436	4684.420	1449.515	.02>	1>	1>	.01>	6	19	.37	.10	.08	7	47	.012	4.8	8	15
137	SM437	4684.116	1449.500	.08	8	1>	.02	33	12	.35	.36	.48	143	93	.282	7.2	38	69
138	SM438	4684.248	1449.164	.02>	2	4	.23	17	14	.40	.66	.76	12	51	.329	10.4	66	81
139	SM439	4684.780	1449.042	.02>	8	1>	.08	15	18	.63	.48	.57	17	99	.686	8.3	59	64
140	SM440	4685.353	1450.034	.02>	1>	1>	4.22	44	38	1.22	1.63	1.53	21	175	.064	10.3	679	77
141	SM441	4685.438	1449.641	.02>	10	1>	.15	29	54	1.06	1.58	.32	18	126	.695	13.5	115	94
142	SM442	4685.950	1449.297	.02>	20	1>	2.06	9	85	.64	.76	3.06	102	52	.135	7.8	303	64
143	SM443	4685.303	1449.410	.02>	30	1>	.17	34	99	.81	.91	.14	19	110	.368	13.6	125	89
144	SM444	4685.055	1449.395	.02>	8	1>	.01>	5	70	.47	.09	.08	8	56	.010	1.2	18	10
145	SM445	4685.065	1449.079	.02>	37	1>	.08	7	134	1.26	.85	.14	26	216	.414	10.0	119	62
146	SM446	4685.589	1449.054	.02>	8	1>	.31	25	53	1.05	1.24	.76	26	143	.468	6.8	123	90
147	SM447	4685.393	1448.844	.02>	80	1>	.03	23	76	.89	.94	.16	15	145	.403	69.3	76	73
148	SM448	4685.220	1448.563	2.16	415	422	.05	61	63	1.08	.25	.14	1699	191	.807	10.1	191	1875
149	SM449	4685.190	1448.332	.02>	38	3	.14	12	28	1.20	.69	.11	20	192	.030	6.7	142	50
150	SM450	4685.629	1448.332	.02>	11	1	.05	25	154	1.12	.81	.63	36	173	.588	3.4	79	115

List of Geochemical Analysis(4)

Ser. No.	Sample No.	Location(km) X-coord	Location(km) Y-coord	Ag ppm	As ppm	Au ppb	Ca %	Cu ppm	Hg ppb	K %	Mg %	Na %	Pb ppm	Rb ppm	S %	Sb ppm	Sr ppm	Zn ppm
181	SM481	4684.400	1449.006	.02>	1>	1>	.16	22	10>	1.01	1.23	.75	17	152	.293	4.0	81	55
182	SM482	4684.123	1448.911	.02>	2	6	.05	21	12	.71	.69	.72	17	99	.377	6.7	59	24
183	SM483	4684.980	1448.467	.02>	24	2	.13	28	33	.69	.51	.14	17	121	.495	9.3	198	64
184	SM484	4684.650	1448.294	.02>	22	5	.25	59	26	.25	.14	.21	11	27	2.804	8.4	87	1650
185	SM485	4684.330	1448.074	.02>	24	1	.03	24	18	.66	.41	.57	17	100	.271	6.7	44	73
186	SM486	4683.815	1448.935	.04	21	1>	.05	11	10	.92	.88	.73	15	139	.366	5.2	59	47
187	SM487	4683.101	1448.222	.09	49	5	.01>	27	22	.49	.12	.08	283	84	.609	9.2	8	763
188	SM488	4682.292	1448.938	.02>	40	6	.04	15	10	.54	.58	.30	22	80	.311	10.2	22	70
189	SM489	4682.164	1449.480	.02>	80	3	.01>	13	29	.48	.10	.07	7	90	.012	8.6	5	12
190	SM490	4682.541	1449.530	.02>	7	1>	.01>	3	22	.14	.01	.06	2>	10	.013	3.5	4	9
191	SM491	4682.389	1448.525	.02>	15	1	.01	11	13	.26	.20	.15	47	22	.404	8.0	29	81
192	SM492	4682.684	1448.292	.02>	8	1>	.02	21	11	.57	.36	.63	24	77	.057	3.8	45	70
193	SM493	4682.274	1448.124	.02>	17	1>	.11	23	33	.96	1.02	.79	22	142	.204	11.1	53	109
194	SM494	4682.059	1448.956	.17	7	1>	.46	10	11	.49	.58	.67	23	58	.022	7.5	48	61
195	SM495	4681.747	1448.713	.14	10	1>	.03	17	20	.69	1.08	.26	36	92	.073	6.4	38	146
196	SM496	4681.571	1448.864	.05	1>	1>	.05	17	22	.68	1.02	.62	18	102	.174	11.0	46	101
197	SM497	4682.999	1447.021	.02>	27	1>	.02	33	17	.70	.47	.21	27	114	.221	7.1	32	32
198	SM498	4681.232	1448.447	.10	2	1>	.18	29	33	1.01	1.26	.75	29	159	.322	9.1	59	132
199	SM499	4681.926	1448.435	.03	12	1>	.02	128	20	.53	.54	.47	29	76	.193	6.8	32	230
200	SM500	4681.524	1448.114	.02>	5	1>	.07	12	25	.36	.83	.77	18	46	.043	7.8	49	55
201	SM501	4681.142	1448.154	.02>	1>	1>	1.89	24	15	.52	2.11	.52	42	69	2.304	17.7	101	110
202	SM502	4680.112	1448.808	.22	4	1>	.73	19	36	.73	1.08	.80	24	114	.284	8.8	76	90
203	SM503	4680.872	1448.517	.35	3	10	.51	87	15	.46	2.29	.57	73	69	2.338	19.5	66	172
204	SM504	4680.330	1448.462	.08	6	1>	1.28	18	39	.49	1.31	.68	28	71	.094	11.1	93	91
205	SM505	4680.575	1448.319	.02>	7	1>	.22	17	30	.61	1.14	.78	21	94	.088	3.6	61	84
206	SM506	4680.825	1448.249	.02>	5	1>	.18	21	28	1.11	1.71	.61	27	179	.133	11.9	50	112
207	SM507	4680.020	1448.056	.02>	4	1>	.09	15	62	.62	.74	.77	19	88	.099	6.4	57	68
208	SM508	4679.777	1446.623	.20	12	1>	.35	26	39	.93	1.22	.72	36	147	.267	7.3	81	104
209	SM509	4680.050	1448.555	.10	1>	1>	.30	22	31	.76	1.28	.73	26	126	.135	15.3	77	111
210	SM510	4679.488	1448.455	.32	5	10	4.46	72	16	1.20	3.05	1.19	32	195	.694	13.7	449	88
211	SM511	4679.178	1448.272	.02>	7	1>	.21	37	51	1.04	1.31	.66	41	161	.436	6.0	91	109
212	SM512	4679.453	1448.034	.02>	5	1>	1.88	22	33	.69	1.31	.84	29	99	.226	5.2	98	90
213	SM513	4679.768	1448.242	.10	6	1	.77	20	32	.75	1.16	.81	22	112	.194	7.4	81	99
214	SM514	4679.587	1447.861	.02>	5	1>	.23	37	69	1.08	1.41	.73	34	167	.442	9.1	84	114
215	SM515	4679.158	1447.608	.32	8	1>	.55	27	37	.81	1.17	.84	25	124	.219	4.9	95	97
216	SM516	4679.660	1447.422	.14	8	1>	.14	31	65	.82	1.19	.66	34	142	.552	4.0	88	121
217	SM517	4679.620	1447.304	.02>	14	1>	.19	27	63	.84	1.14	.78	27	127	.333	2.6	86	112
218	SM518	4679.505	1447.144	.02>	4	1>	.22	20	20	.40	1.40	1.05	41	55	.452	12.8	110	267
219	SM519	4680.190	1447.943	.02>	6	1>	.09	11	29	.47	.67	.84	15	68	.257	4.0	38	71
220	SM520	4680.377	1447.821	.02>	1>	1>	.22	24	67	1.00	1.17	.78	38	141	.436	4.9	74	105
221	SM521	4680.652	1447.653	.02>	1>	1>	.06	13	40	.73	.49	.82	13	69	.153	2.7	52	49
222	SM522	4680.930	1447.324	.02>	1	1>	.63	25	34	.93	1.13	1.02	18	99	.403	7.4	94	102
223	SM523	4680.694	1447.372	.03	1>	1	1.73	140	38	2.08	2.68	1.81	16	172	.173	11.8	403	76
224	SM524	4680.752	1447.191	.02>	1>	1>	.48	19	24	1.03	1.22	1.09	21	115	.275	8.4	110	83
225	SM525	4681.157	1447.863	.02>	1>	1>	2.91	51	24	.62	1.87	2.87	20	49	.348	8.3	649	76
226	SM526	4681.487	1447.826	.02>	1>	4	.16	16	22	.81	.84	1.04	14	83	.099	7.8	69	67
227	SM527	4681.874	1447.868	.02>	34	2	.02	17	13	.57	.71	.86	76	67	.500	3.7	53	110
228	SM528	4681.709	1447.755	.02>	1>	1>	.12	16	11	.78	.83	.99	18	87	.160	2.8	68	78
229	SM529	4681.357	1447.542	.02>	2	1>	.06	22	17	.81	.80	.70	14	96	.013	6.6	48	104
230	SM530	4681.040	1447.464	.02>	1>	1>	.10	17	36	.76	.92	.90	17	89	.040	4.6	60	72

List of Geochemical Analysis(6)

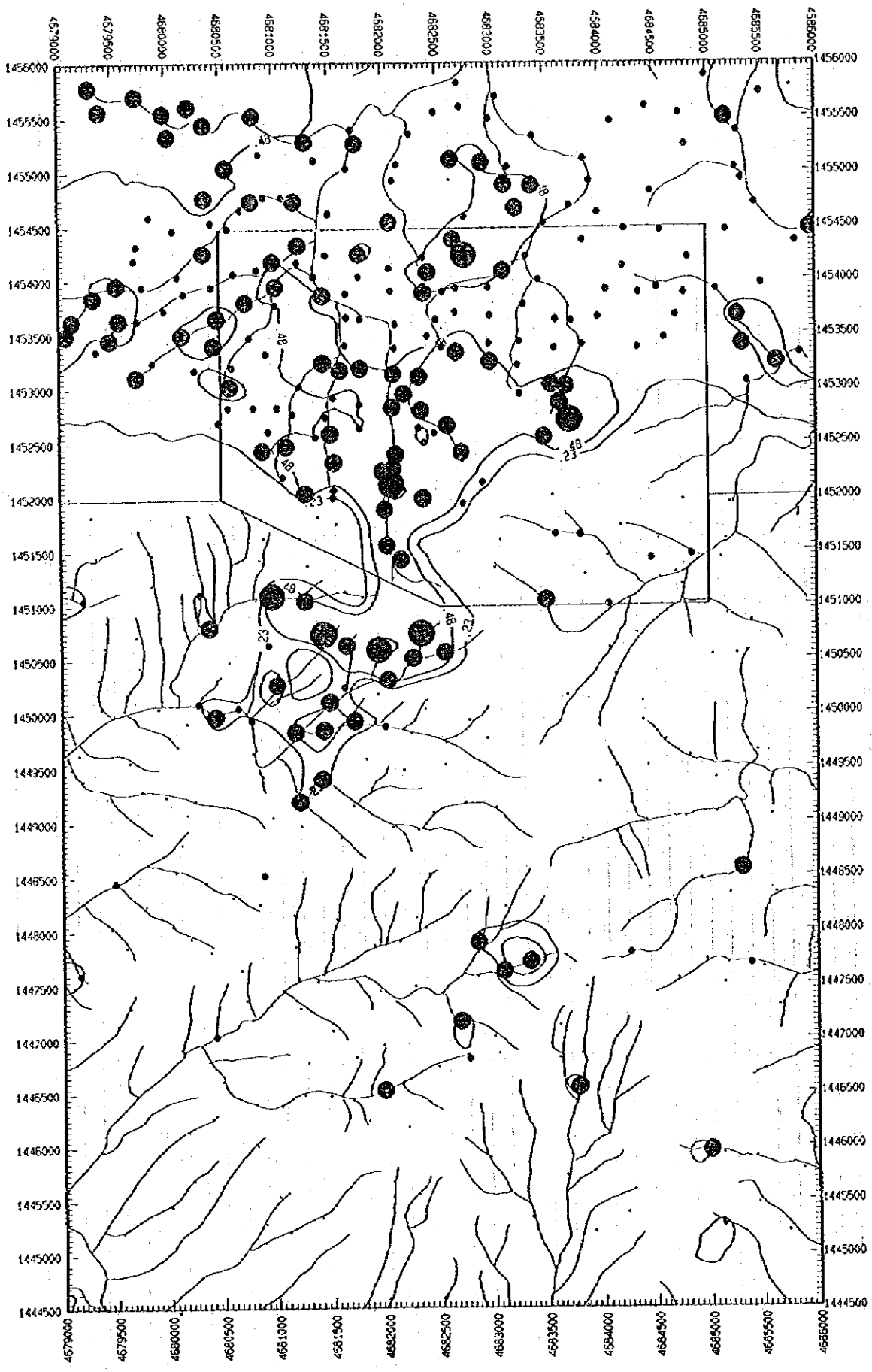
Ser. No.	Sample No.	Location(km) X-coord	Location(km) Y-coord	Ag ppm	As ppm	Au ppb	Ca %	Cu ppm	Hg ppb	K %	Mg %	Na %	Pb ppm	Rb ppm	S %	Sb ppm	Sr ppm	Zn ppm
201	SM501	4681.200	1447.294	.02>	1>	1>	.21	21	29	.27	1.21	.85	19	103	.359	6.7	61	79
202	SM502	4681.457	1447.083	.02>	7	1>	.06	22	18	.56	.91	.54	20	119	.060	5.2	50	47
203	SM503	4682.354	1446.029	.02>	1>	1>	.14	27	34	1.23	1.11	.51	22	157	.361	5.2	57	91
204	SM504	4682.846	1447.896	.97	69	19	.05	78	20	.75	.38	.09	304	114	2.022	12.0	12	148
205	SM505	4682.117	1447.911	.02>	16	1>	.11	11	11	.60	.62	.55	40	78	.126	8.2	35	76
206	SM506	4682.841	1447.585	.02>	5	1>	.01>	15	15	.62	.28	.08	18	84	.079	5.4	8	48
207	SM507	4682.262	1447.492	.02>	10	1>	.06	14	17	.83	.77	.84	12	106	.027	5.4	58	73
208	SM508	4681.929	1447.452	.02>	1>	1>	.35	20	10>	1.40	1.52	.78	22	201	.219	9.8	110	97
209	SM509	4682.503	1447.422	.02>	6	1>	.06	17	10>	.89	.76	.60	24	122	.287	8.2	37	81
210	SM510	4682.761	1446.818	.30	2	1>	.02	41	10>	1.19	.79	.27	100	150	.722	8.4	25	89
211	SM511	4682.681	1447.166	1.22	4529	213	.02	90	89	.36	.63	.07	33	58	2.565	195.9	8	71
212	SM512	4683.338	1447.718	1.82	824	255	.01>	53	91	.77	.14	.07	47	137	.527	26.1	6	32
213	SM513	4683.088	1447.630	.68	4	5	.40	56	10>	.74	1.49	.59	171	109	.917	13.8	49	205
214	SM514	4683.851	1447.477	.02>	1>	1>	.01>	6	40	.50	.25	.08	11	65	.011	.2>	14	22
215	SM515	4683.855	1447.184	.02>	1>	1	.01	4	16	.52	.11	.23	5	65	.007	1.9	36	13
216	SM516	4683.608	1447.126	.02>	13	1>	.01>	4	85	.10	.03	.05	2	2	.039	9.8	4	7
217	SM517	4684.588	1448.084	.02>	2	1>	.55	159	10>	.77	1.19	.58	11	98	2.572	14.1	55	115
218	SM518	4684.248	1447.791	.46	25	12	2.11	110	43	.91	1.89	1.98	28	96	.624	14.2	552	456
219	SM519	4684.595	1447.881	.02>	20	1>	.06	16	18	.62	.25	.54	8	85	.129	6.8	38	32
220	SM520	4684.967	1447.723	.18	1>	2	.57	45	10>	.79	1.28	.62	20	105	.894	13.2	91	116
221	SM521	4684.710	1447.552	.02>	1>	2	.08	21	101	.63	.63	.69	11	79	1.283	17.2	53	81
222	SM522	4685.167	1447.693	.02>	12	1>	.07	16	61	.83	.62	.66	20	103	.413	7.0	75	69
223	SM523	4685.892	1447.632	.02>	1>	1>	2.15	13	50	.40	1.61	.99	9	38	.068	16.4	91	75
224	SM524	4685.512	1447.647	.02>	3	2	.10	29	50	1.15	1.12	.76	21	154	.101	8.4	95	98
225	SM525	4685.138	1447.507	.02>	21	1>	.01>	8	119	.43	.09	.07	6	46	.005	3.9	38	14
226	SM526	4685.649	1447.297	.02>	1>	1>	.50	16	41	.60	2.09	.49	15	75	.203	15.9	64	91
227	SM527	4685.395	1447.685	.29	1>	3	2.22	32	33	.79	1.33	2.19	37	67	.276	11.9	939	88
228	SM528	4685.512	1446.705	.02>	1>	1>	1.18	16	179	1.14	1.04	.62	19	167	.228	5.2	103	82
229	SM529	4685.812	1446.833	.02>	1>	1>	1.11	19	120	1.19	1.18	.72	24	167	.315	4.0	87	68
230	SM530	4684.195	1446.810	.02>	6	1>	.01>	4	26	.17	.02	.06	2>	15	.008	4.1	9	9
231	SM531	4684.056	1446.193	.02>	17	3	.01>	4	37	.35	.02	.11	6	36	.007	6.9	24	5
232	SM532	4683.036	1446.862	.04	1>	1	2.88	43	21	.85	1.49	1.80	126	71	.030	7.8	753	174
233	SM533	4683.603	1446.820	.21	1>	1>	3.69	9	55	.53	2.16	1.38	21	62	.041	16.7	498	80
234	SM534	4683.800	1446.858	.02>	1>	1>	.02	8	83	.27	.38	.07	2>	36	.003	6.2	18	44
235	SM535	4683.775	1446.547	1.35	22	14	.01>	345	33	.42	.06	.07	16	54	.124	13.6	9	13
236	SM536	4683.221	1446.499	.02>	4	1>	.06	21	17	.62	.56	.62	16	86	.014	3.9	49	82
237	SM537	4683.309	1446.256	.02>	1>	1>	.11	18	10>	.79	.91	.81	8	117	.099	3.3	62	87
238	SM538	4682.469	1446.745	.12	1>	3	.08	63	20	.86	.84	.46	8	127	.703	7.1	88	34
239	SM539	4681.974	1446.529	.56	1>	39	.13	1026	32	1.08	1.24	1.01	12	143	.544	6.8	84	31
240	SM540	4682.134	1446.587	.09	1>	4	.13	290	89	.96	1.06	.68	12	153	.608	9.3	62	24
241	SM541	4682.191	1446.183	.02>	1	1>	.11	27	25	.98	.99	.76	12	145	.232	4.6	60	57
242	SM542	4682.863	1446.316	.02>	3	1>	.11	36	333	1.00	.73	.20	24	146	.009	4.1	49	76
243	SM543	4681.964	1446.946	.02>	1>	3	.02	89	33	1.10	.30	.18	28	148	.019	1.8	17	29
244	SM544	4681.702	1446.835	.02>	5	1>	.01	78	78	1.46	.63	.17	25	180	.008	2.6	49	27
245	SM545	4681.671	1446.434	.19	1>	42	.47	542	15	.98	1.29	1.39	24	122	.043	6.4	116	33
246	SM546	4681.467	1446.479	.10	1>	14	.43	317	133	1.20	.92	1.75	28	150	.118	2.7	108	22
247	SM547	4681.234	1446.487	.02>	1>	1>	.09	39	24	1.02	1.26	.69	19	138	.329	5.3	52	48
248	SM548	4681.270	1446.790	.02>	1>	1>	.16	21	24	1.09	1.33	.69	22	157	.207	3.6	61	96
249	SM549	4681.819	1446.244	.09	1>	20	.28	674	10>	1.31	1.24	1.02	5	171	.823	5.6	83	26
250	SM550	4680.092	1446.916	.02>	1>	1>	1.15	21	115	.63	.96	.92	17	77	.389	7.3	83	64

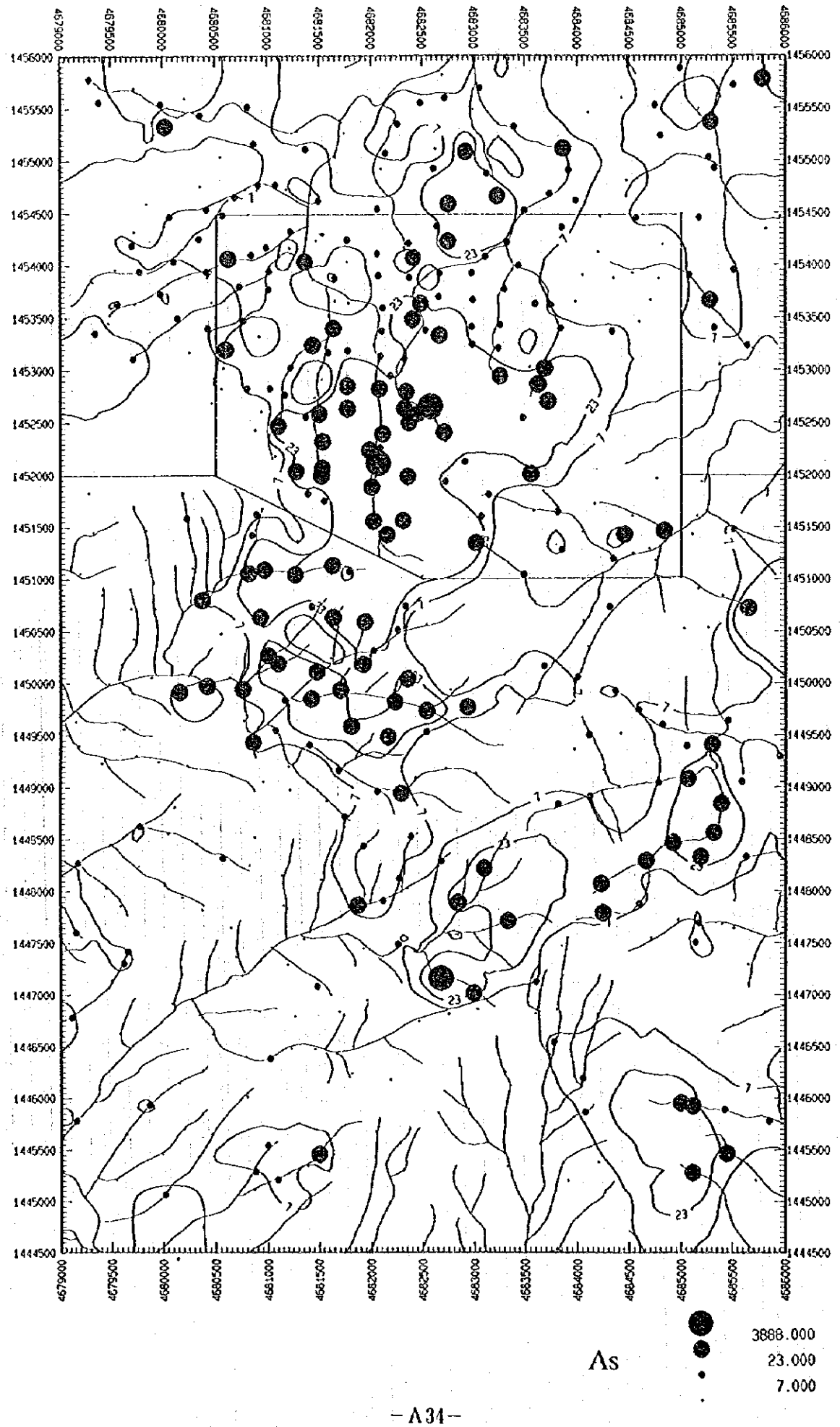
List of Geochemical Analysis(5)

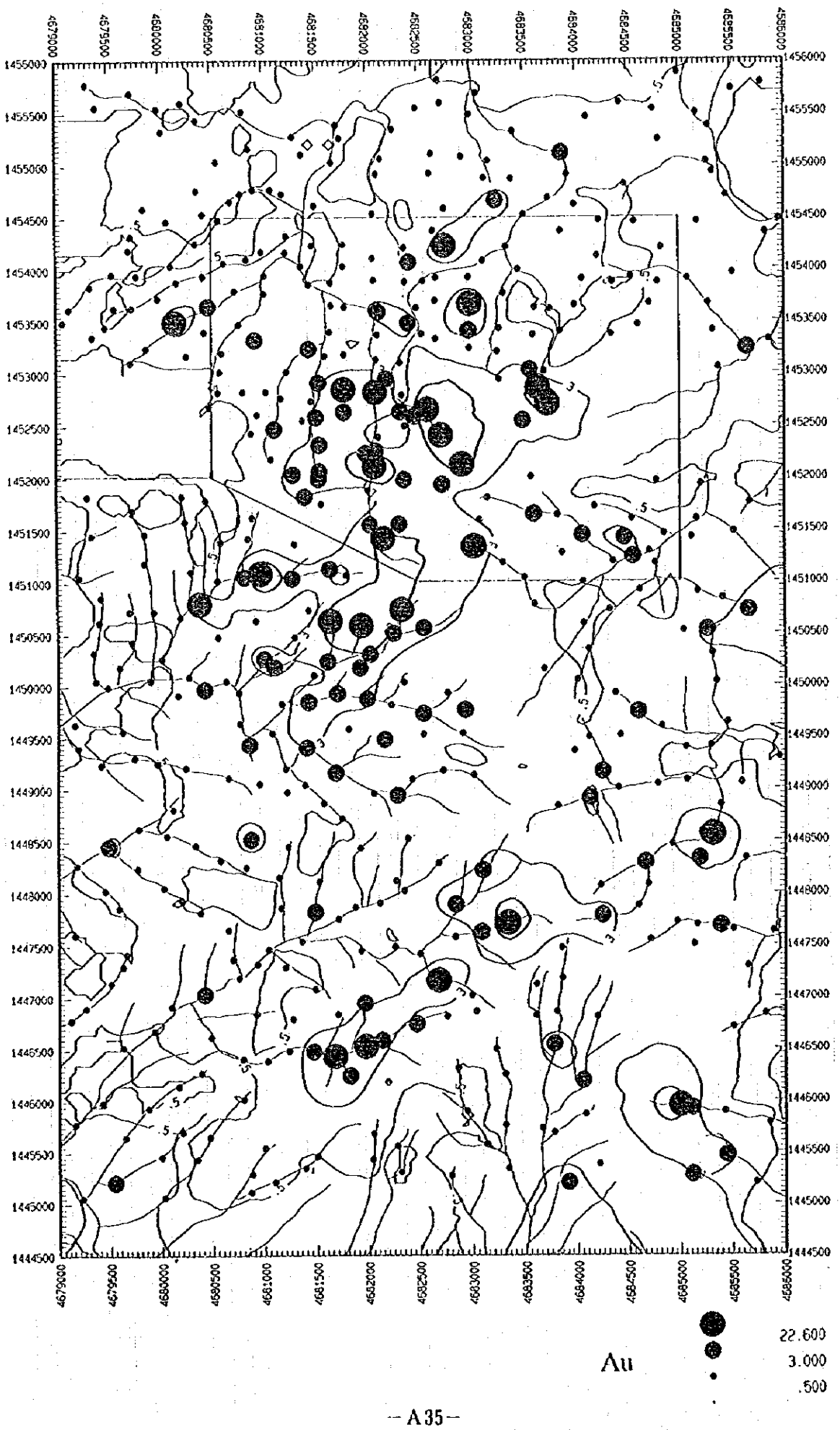
Ser. No.	Sample No.	Location(km) X-coord	Location(km) Y-coord	Ag ppm	As ppm	Au ppb	Ca %	Cu ppm	Hg ppb	K %	Mg %	Na %	Pb ppm	Rb ppm	S %	Sb ppm	Sr ppm	Zn ppm
251	SM551	4680.417	1447.036	.26	1>	4	3.35	96	18	.94	2.95	1.50	29	97	.578	16.9	395	79
252	SM552	4680.922	1446.843	.02	4	1>	.37	19	44	.80	1.06	.91	14	103	.080	7.5	74	85
253	SM553	4680.480	1446.622	.06	5	1>	.77	32	54	.78	1.46	.86	17	95	.341	11.9	93	92
254	SM554	4680.790	1446.409	.02>	1>	1>	.15	26	44	.84	.95	.96	19	108	.049	3.1	74	79
255	SM555	4681.027	1446.386	.02>	8	1>	.16	23	141	.63	1.96	.52	21	89	.512	15.6	51	100
256	SM556	4680.382	1446.274	.02>	5	1>	.07	9	118	.46	.65	.61	16	58	.048	6.8	62	51
257	SM557	4680.160	1446.146	.02	1>	1>	1.00	17	333	.63	1.04	.79	12	87	.124	8.6	76	65
258	SM558	4680.799	1446.018	.02>	1>	1>	.15	25	38	.79	.98	.87	21	110	.505	6.1	74	75
259	SM559	4679.258	1446.900	.02>	1>	1>	.44	23	63	.75	.99	.84	17	111	.204	6.0	71	80
260	SM560	4679.116	1446.783	.02>	12	1>	.14	21	105	.59	.73	.82	13	76	.120	1.2	80	62
261	SM561	4679.928	1446.682	.02>	1>	1>	.12	23	43	.66	.82	.89	15	92	.081	5.9	79	78
262	SM562	4679.623	1446.524	.06	1>	1>	1.10	18	42	.64	1.06	.85	16	87	.259	11.6	92	71
263	SM563	4679.420	1445.985	.07	3	1>	.70	24	75	.84	1.21	.78	25	134	.962	12.5	88	90
264	SM564	4679.868	1445.933	.11	14	1>	.18	27	373	.77	1.01	.87	15	116	.133	7.1	94	89
265	SM565	4679.643	1445.649	.02>	3	1>	.28	30	82	.81	1.23	.81	23	131	.533	7.6	91	100
266	SM566	4679.158	1445.782	.02>	7	1>	.11	45	322	.99	1.18	.72	26	153	.061	13.0	88	103
267	SM567	4679.542	1445.211	.07	4	6	.83	20	36	.72	1.04	.89	21	106	.179	5.5	93	80
268	SM568	4679.993	1445.459	.02>	1>	1>	.24	18	46	.79	.99	.80	21	115	.286	5.2	82	90
269	SM569	4679.223	1446.055	.16	1>	1>	.08	27	47	.85	1.00	.71	27	127	.429	5.8	81	110
270	SM570	4680.200	1445.697	.02>	6	1>	.68	20	33	.68	.97	.85	19	99	.213	7.6	88	83
271	SM571	4680.467	1445.654	.08	6	1>	.30	13	34	.62	.80	.91	24	90	.098	8.2	87	90
272	SM572	4680.342	1445.436	.03	6	1>	.20	26	48	.80	1.05	.86	16	131	.299	9.0	97	99
273	SM573	4680.020	1445.065	.02>	15	1>	1.53	21	111	.98	1.64	.66	37	153	.305	19.1	153	105
274	SM574	4680.879	1445.291	.02>	7	2	.17	16	49	.63	.86	.89	23	90	.012	9.9	89	64
275	SM575	4680.867	1445.115	.02>	2	1>	.12	22	193	.63	.88	.79	23	95	.069	4.6	83	78
276	SM576	4681.504	1445.461	.03	23	1>	.11	25	39	1.06	.81	.46	24	180	.006	10.7	55	95
277	SM577	4681.002	1445.544	.11	22	1>	.13	47	46	1.89	1.43	.63	44	173	.437	16.7	66	143
278	SM578	4681.390	1445.349	.02>	5	1>	.56	29	30	.94	1.51	.72	32	144	.231	12.4	79	111
279	SM579	4681.100	1445.211	.02>	11	1>	.59	23	80	.70	1.11	.85	23	124	.392	10.5	98	103
280	SM580	4682.049	1445.679	.02>	5	1>	.22	22	49	.73	.99	.92	19	114	.225	9.3	85	89
281	SM581	4682.949	1445.898	.02>	3	1>	.29	13	10>	.42	.87	.95	14	60	.109	6.9	92	90
282	SM582	4682.282	1445.562	.02>	1>	1>	4.89	27	33	.28	1.84	.41	35	39	1.368	15.2	258	109
283	SM583	4683.136	1445.577	.11	1>	1>	.21	25	30	.60	1.07	.66	28	98	.727	9.0	66	96
284	SM584	4682.798	1445.273	.02>	1>	1>	3.78	41	18	.59	1.78	1.60	25	70	.042	12.4	709	82
285	SM585	4682.319	1445.308	.16	1>	1>	3.64	38	35	.42	1.63	2.20	68	48	.336	11.5	677	77
286	SM586	4682.039	1445.431	.02>	1>	1>	.15	11	10>	.41	.68	.69	12	56	.035	6.3	62	60
287	SM587	4683.663	1445.732	.02>	5	1>	.01	4	49	.25	.06	.06	3	31	.013	5.1	10	11
288	SM588	4683.309	1445.765	.02>	1	1>	.07	13	246	.51	.63	.59	20	82	.005	5.7	50	80
289	SM589	4683.775	1445.692	.02>	1>	1>	.01>	3	39	.38	.09	.06	90	59	.004	5.5	11	9
290	SM590	4683.911	1445.206	.06	1>	10	2.21	2	41	.58	1.88	1.47	19	75	.458	8.8	469	98
291	SM591	4683.336	1445.344	.08	5	1>	.05	11	22	.45	.45	.36	19	66	.007	7.3	32	61
292	SM592	4684.078	1445.868	.02>	18	1>	.01>	9	19	.21	.02	.06	2>	20	.002	4.6	8	8
293	SM593	4684.210	1445.384	.02>	6	1>	.01>	3	526	.13	.01	.05	2>	8	.003	2.3	4	5
294	SM594	4685.000	1445.953	.53	132	121	.28	27	155	.97	.73	.11	79	194	2.365	20.0	89	163
295	SM595	4685.118	1445.925	.02>	25	5	.12	7	205	.92	.39	1.16	39	122	.018	6.3	379	43
296	SM596	4685.430	1445.887	.02>	16	1>	1.18	16	357	.46	1.28	.65	48	73	.715	13.4	154	95
297	SM597	4685.852	1445.780	.02>	14	1>	.10	9	107	.63	2.11	.48	31	113	.697	18.1	82	124
298	SM598	4685.450	1445.466	.02>	23	8	.14	20	15	.75	1.02	.09	15	145	.215	14.1	44	60
299	SM599	4685.115	1445.281	.30	41	3	.15	25	50	1.09	.95	.39	25	240	.704	17.4	37	108
300	SM600	4685.725	1445.206	.02>	2	1>	.76	193	51	.12	3.73	.06	5	10	.312	33.2	37	120

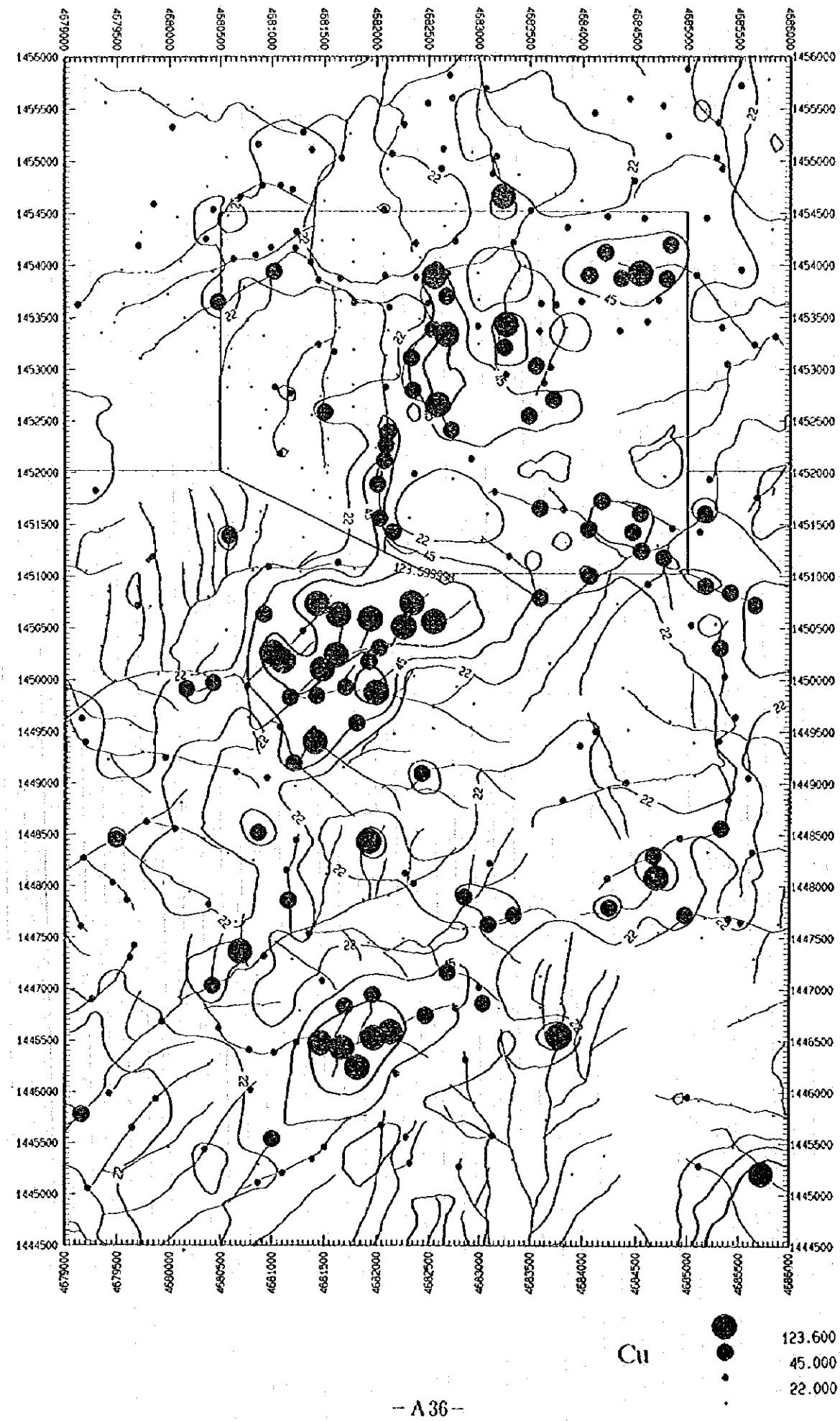
Appendix 4

Distribution map of elements in S. Imbak Sub-area South


Ag
4.330
.480
.230


As
3888.000
23.000
7.000


Au
22.600
3.000
.500


4679000
4679500
4680000
4680500
4681000
4681500
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4682500
4683000
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4684000
4684500
4685000
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4686000
1456000
1455500
1455000
1454500
1454000
1453500
1453000
1452500
1452000
1451500
1451000
1450500
1450000
1449500
1449000
1448500
1448000
1447500
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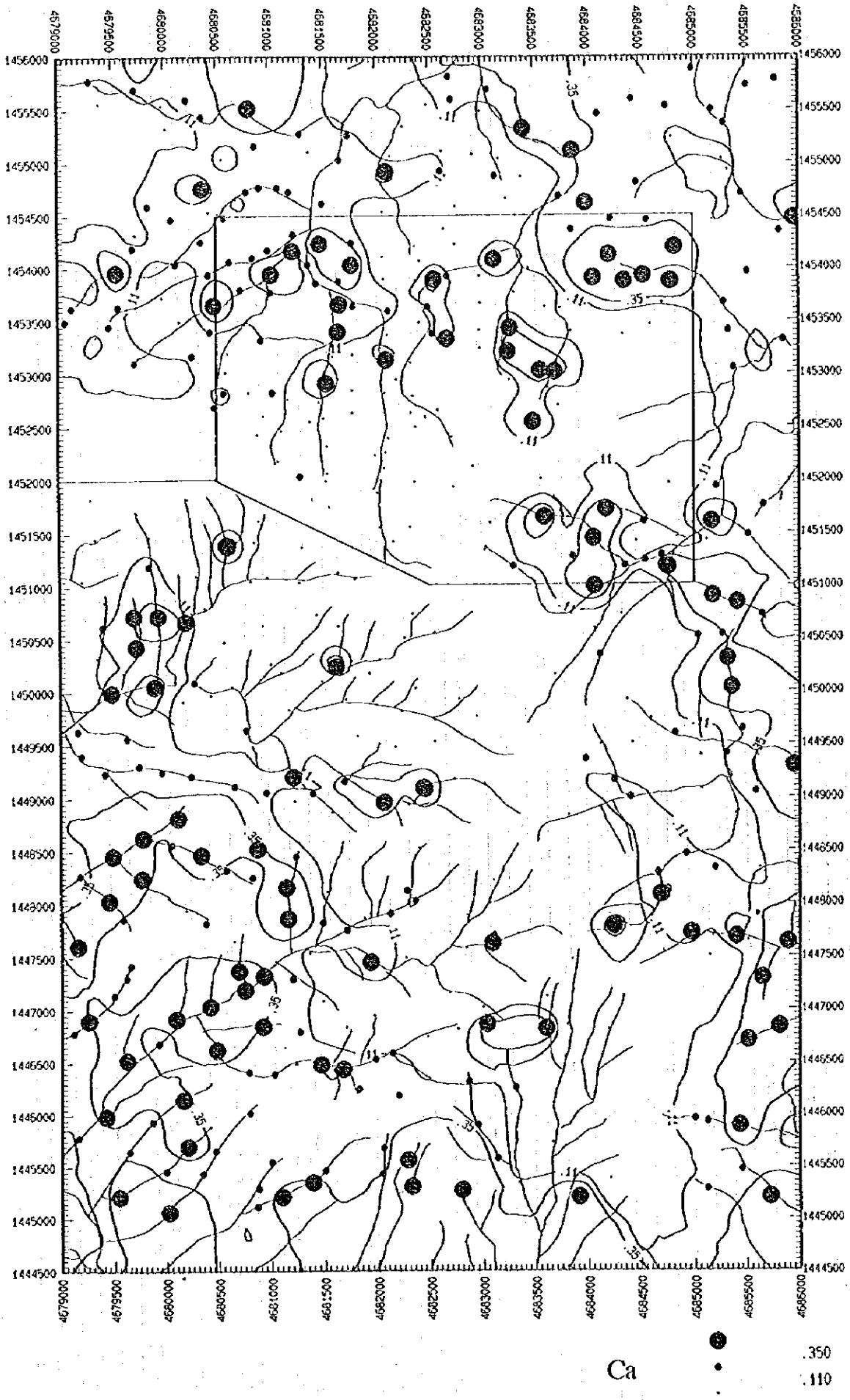
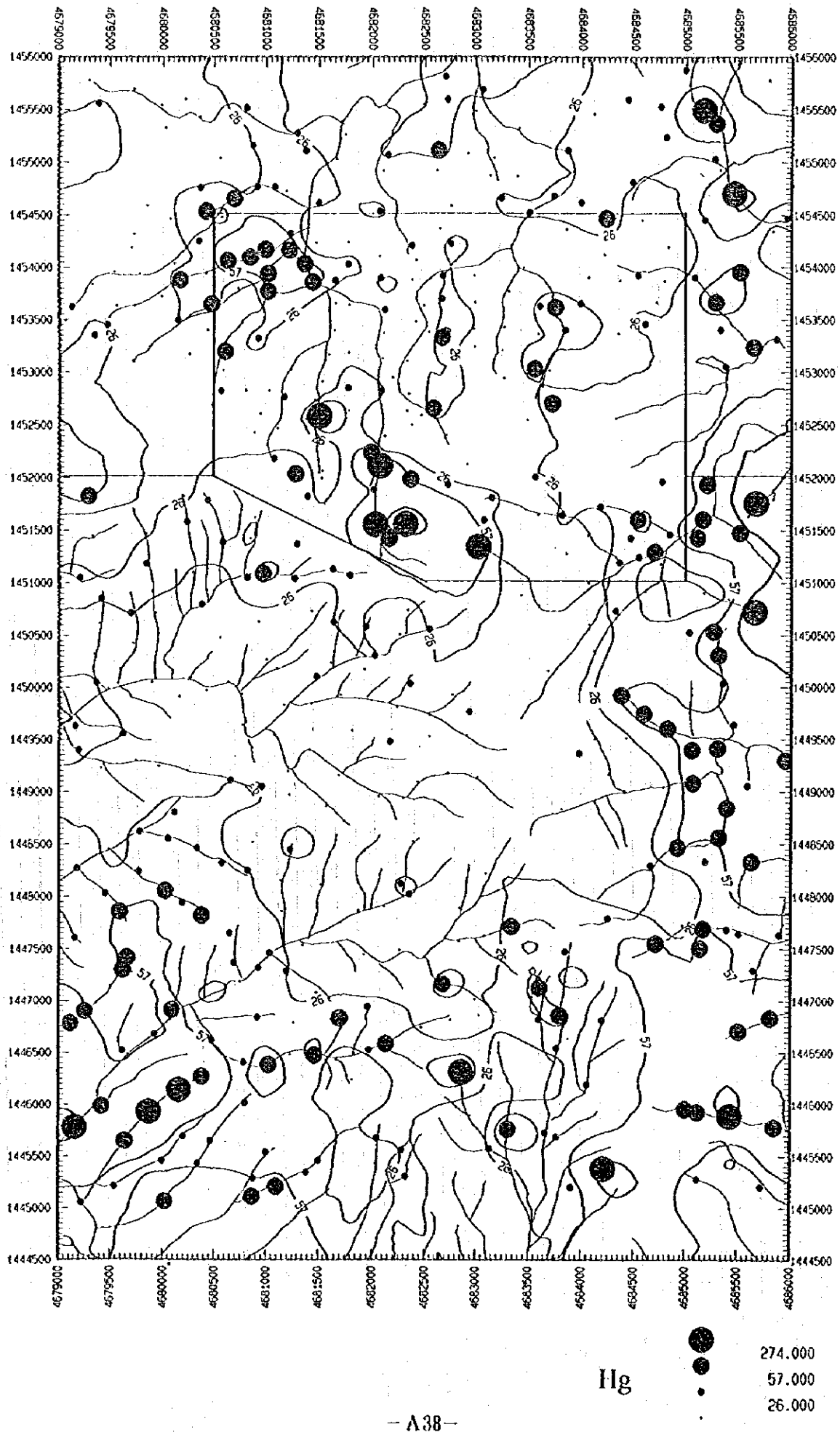
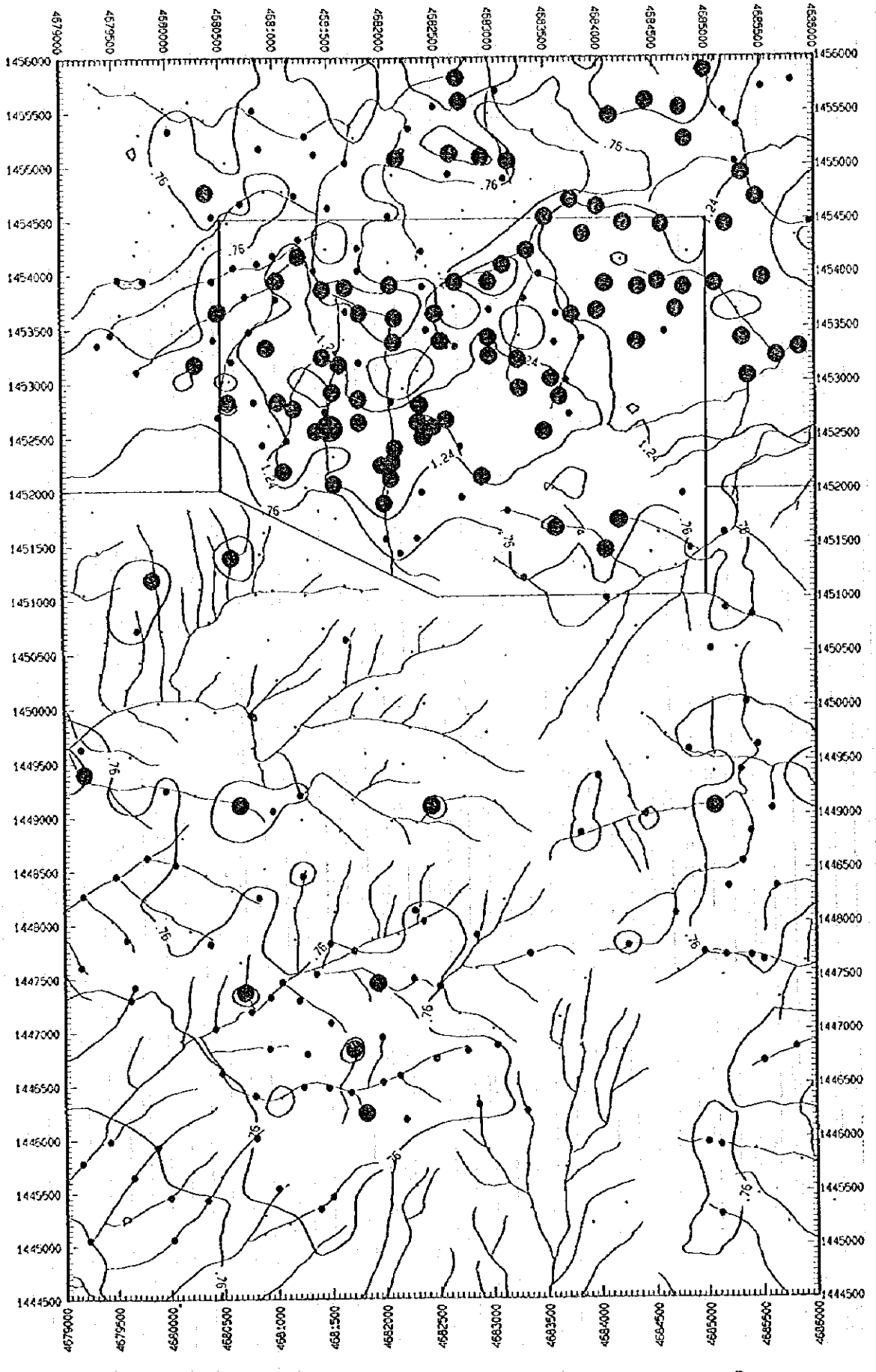
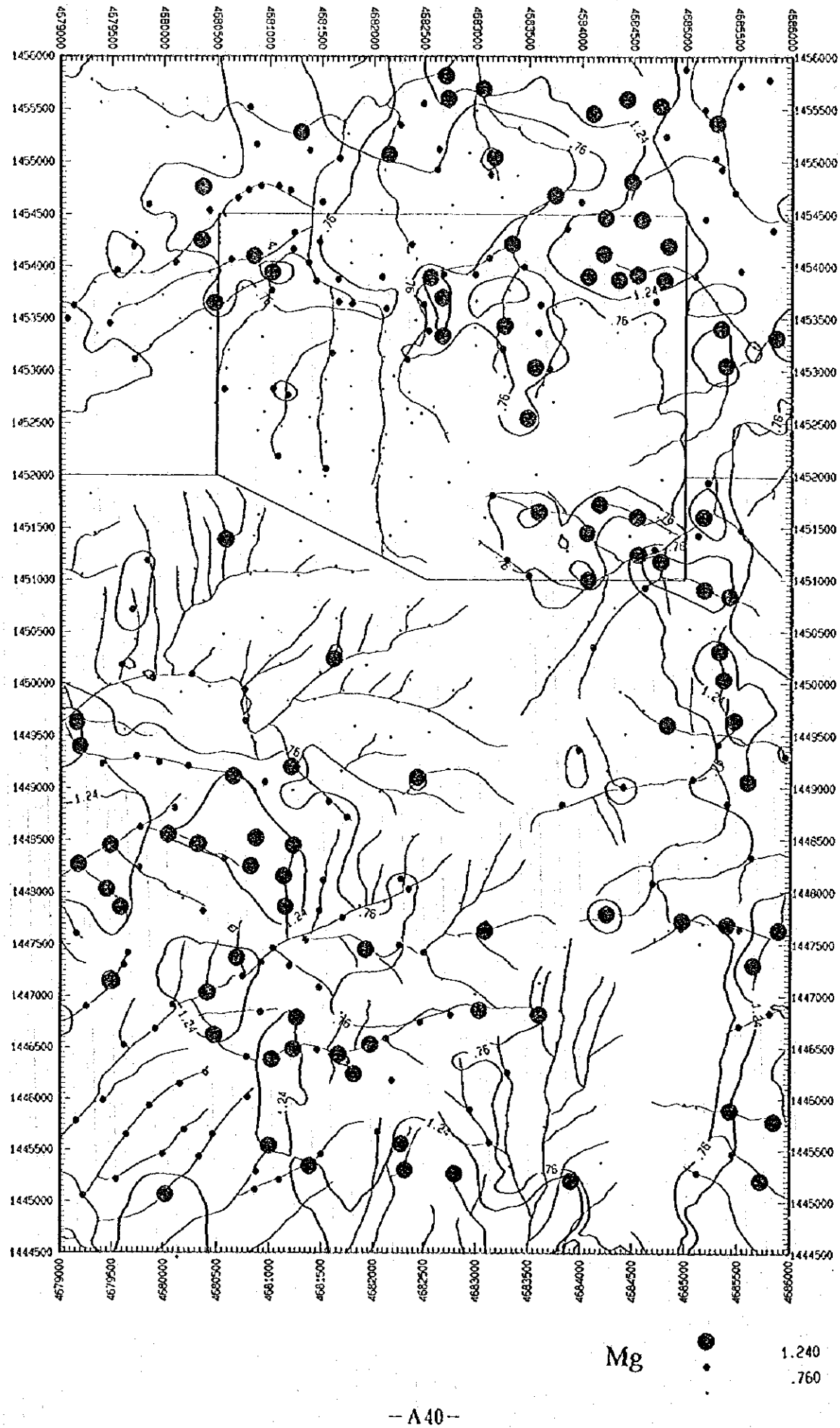
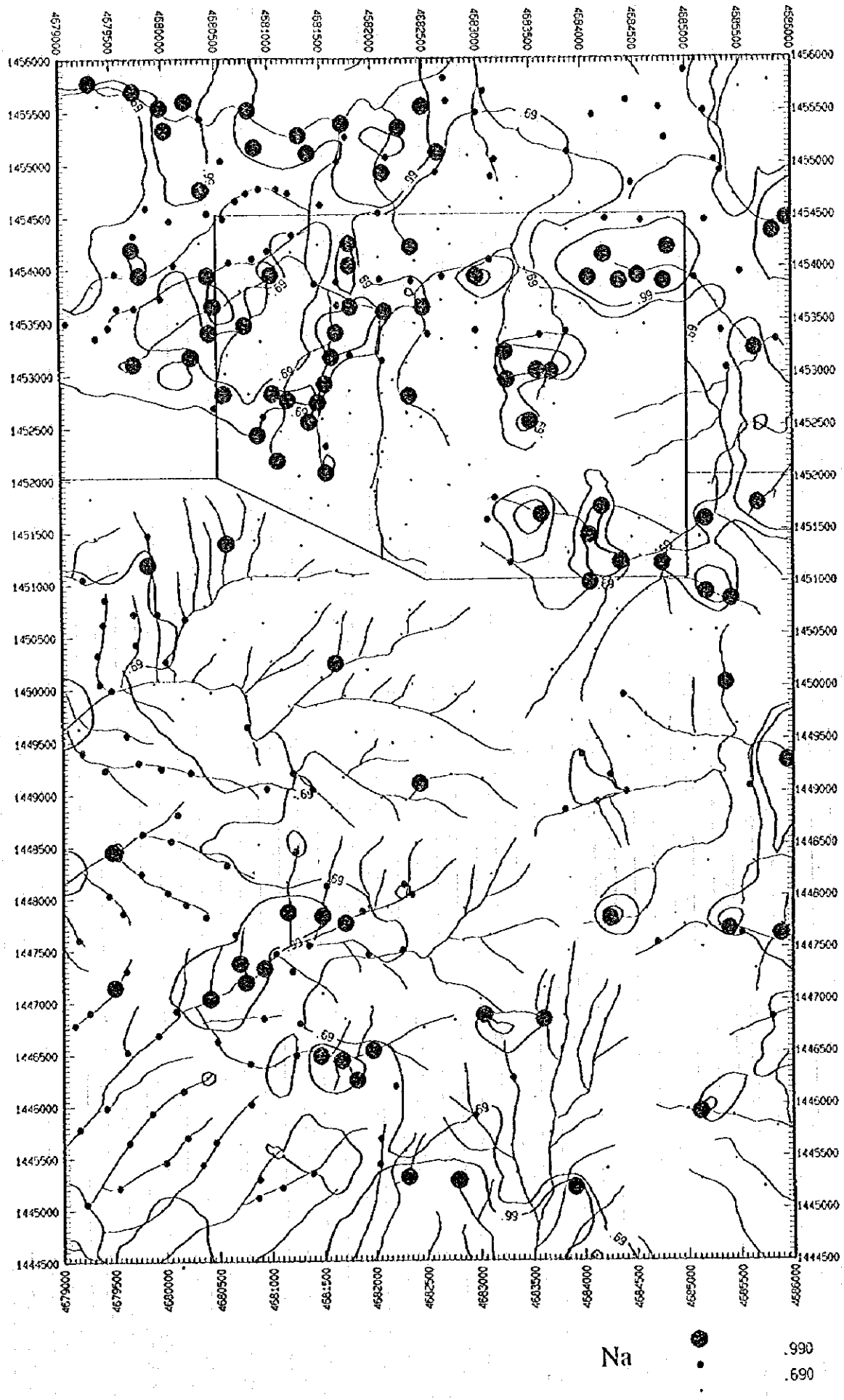
45
123.599998
Cu
123.600
45.000
22.000

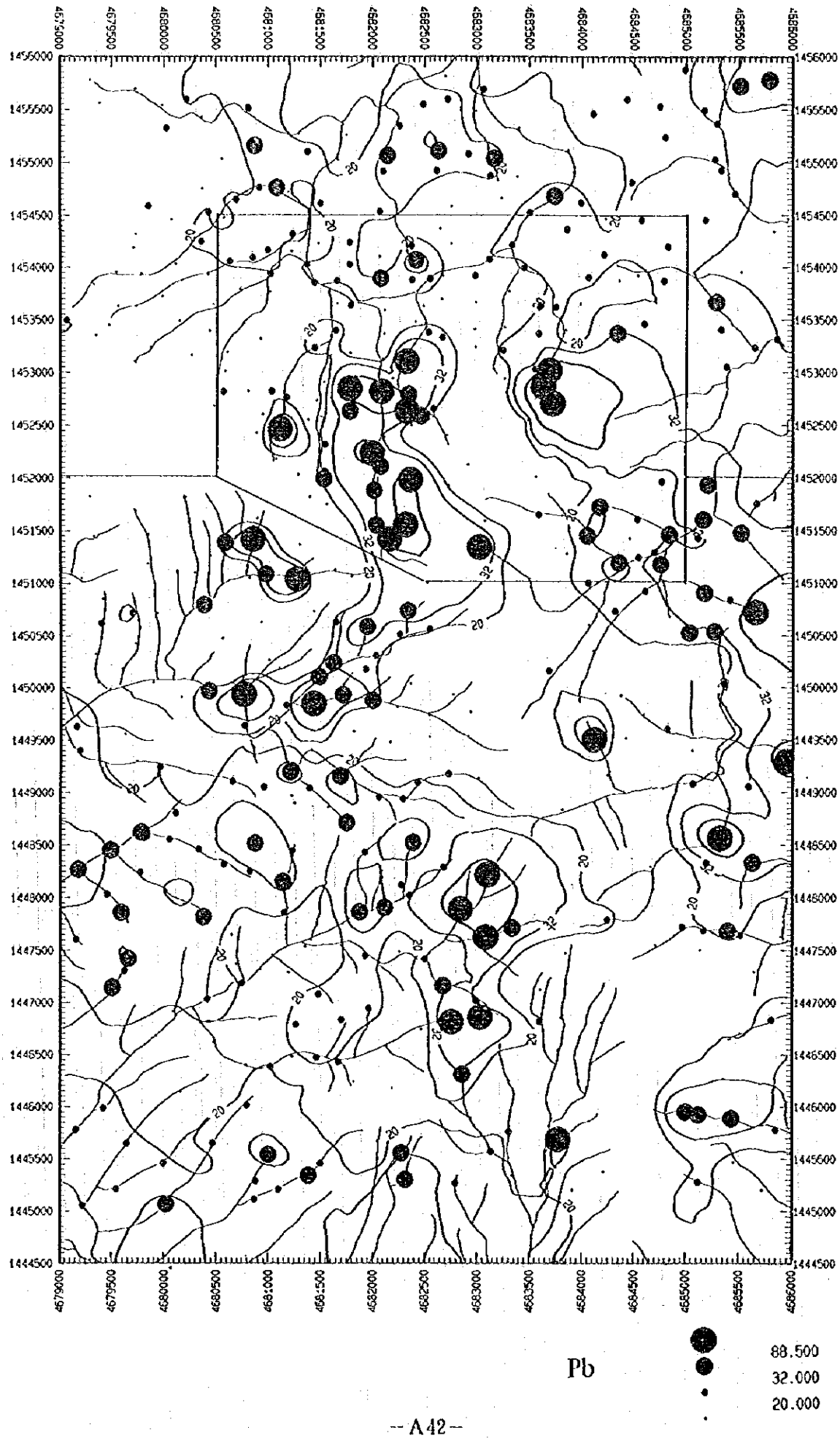

Ca
.350
.110


Hg
274.000
57.000
26.000


K
3.839
1.240
.760


Mg
1.240
.760


Na
.990
.690


Pb
88.500
32.000
20.000