APPENDICES

Appendix 1 Microscopic observation of rock thin section

Sample No.		Rock Name	Texture	Phenocryst, Fragment							Groundmass, matrix					Accesary mineral				Secondary mineral									
				Pl	Kf	Opx	Cpx	Hb	Opq	Rf	Qz	Pl	Cpx	Opq	Gl	Ap	Zr	Sph	Ale	Sc	Se	Pr	Cb	Chl	Ep	Act	Sme	Oq	Hem	Gt	Sph
1	AR-004	hb-2px microdiorite	ophitic	◎		Op	○	◎	△							△	·			○	△	△		○	△			△		·	·
2	AR-014	cpx basalt	intergranular	○			○					◎	◎	◎	·	△				△	△		○	○				△	○		·
3	CR-010	hb-2px microdiorite	ophitic	◎		○	○	◎	△		·					△	△			○	△			○	○		·	△			
4	DR-006	(cpx) basaltic andesite	intergranular	◎			Op					◎	△	◎		·					△		◎	○	·			△	·	△	
5	DR-023	(hb) dacite	graphic	◎				Op	○		△	◎		△		△	△				·	○	△	△	△		△	△	·		△
6	ER-011	opx-cpx andesite	intersertal	○		◎p	○					◎	△	△	△	·					△		△	○		○					△
7	FR-002	opx-cpx andesite	intersertal	○		Op	○				·	◎	○	△	△	·					○		○	○		○					△
8	GR-012	hb-2px microdiorite	ophitic	◎		○	△	◎	△		△					·	·	·		○	·		·	○	○			△			△
9	GR-024	(cpx) basalt	intergranular	◎			Op					◎	◎	◎	·	·					○		○	○	△	·					△
10	HR-006	pl porphyritic basalt	intergranular	◎					◎			◎		○		○					△		◎	○					△		
11	HR-024	rhyolitic tuff		◎	△			△p	○	△	△					·	△			○	△						△	△		△	
12	HR-025	rhyolitic welded tuff	eutaxitic	◎	△			△p	○	◎	△				Op	·	△			○	△							△	△		
13	HR-036	rhyolitic welded tuff	eutaxitic	◎	△			△p	△	◎	△				◎p	△	·			○	△			·	○			△	△		
14	HR-054	hb-Cpx diorite porphyry	porphyritic	◎		△p	○	◎	△		△					△		·	·	·	·	·	△	○	◎			△			△

Symbols:

◎ abundant ○ common

△ rare · tiny

p: psudomorph

Abbreviation.

Qz:quartz Pl:plagioclase Kf:potash feldspar Opx:orthopyroxene Cpx:clinopyroxene Hb:hornblend Opq:opaque minerals

Ap:apatite Zr:zircon Sph:sphene Ale:allenite Sc:sillica minerals Se:sericite Pr:prehnite Cb:carbonate Chl:chlorite

Ep:epidote Act:actinorite Sme:smectite Hem:Hematite Gt:geothite Rf:rock fragment Gl:volcanic glass

Appendix 2 Microscopic observation of ore polished thin section

No.	Sample No.	Rock Type	Opaque mineral											Rock forming mineral																Remarks
			Cl	Bo	Cp	Cv	Sp	Py	Pr	Mg	He	Lm	Ru	Mon	Chl	OCl	Se	Ka	Ep	Ca	Pn	La	Ac	Q	Pl	Ab	Kf	Hb	Ap	Au	Sh	
1	AR-22	Limonite-Quartz Vein					·	·				◎			·		○							○		?						Lm:colloform structure, Q:fine grained~amorphous silica
2	AR-33	Quartz Vein													○									◎								Q:coarse grained
3	BR-02	Quartz-Limonite Vein						·				○			○									◎								
4	CR-15	Quartz Vein										△			○									◎								Q:coarse grained
5	CR-18	Quartz Vein						·				△			△									◎								
6	CR-21	Quartz Vein										△			△									◎								Qz grains filled with Li and Chl, native Cu: ·?
7	CR-43	Quartz Vein										△			○									◎								Q:coarse grained
8	DR-03	Quartz Vein										△			○									◎								Q:coarse grained
9	GR-05	Quartz Vein						·				△			○	△								◎								Q:coarse grained Py:very fine grained Oxidized-Chl:△
10	GR-32	Quartz Vein										·			△	△								◎								Q:coarse grained, partly fine Oxidized-Chl:△
11	HR-80	Altered Andesite					·	△				◎												△								Lm:colloform structure Amorphous silica:△

[Symbols] ◎:abundant ○:common △:rare ·:tiny ?:uncertain

Cl:Chalcocite Bo:Bornite Cp:Chalcopyrite Cv:Covelline Sp:Sphalerite Py:Pyrite Pr:Pyrrhotite Mg:Magnetite He:Hematite Lm:Limonite(mostly Goethite) Ru:Rutile

Mon:Montmorillonite Chl:Chlorite OCl:Oxidized Chlorite Se:Sericite Ka:Kaolinite Ep:Epidote Ca:Calcite Pn:Prehnite La:Laumontite Ac:Actinolite Q:Quartz

Pl:Plagioclase Ab:Albite Kf:Potassium feldspar Hb:Hornblende Ap:Apatite Au:Augite Sh:Sphene

Appendix 3 Result of X-ray diffraction(1)

	Sample No.	Rock Type	Qz	Pl	Kf	Px	Chl	Ep	Mus	Mon	Pyr	Kao	Nac	An	Cal	Dol	Sid	Py	Hem	Goe
1	AR-01	Altered Tuff	◎						△											
2	AR-03	Altered Tuff	◎						△											
3	AR-06	Silicified Tuff	◎						△			·								
4	AR-08	Argilitic Tuff	◎						△			·								
5	AR-10	Altered Rhyolitic Tuff	◎	○					△	△		△								
6	AR-11	Altered Andesite	◎	△					△	△		·								
7	AR-13	Altered Tuff	◎						△	·										
8	AR-18	Altered Tuff	◎						△	?										
9	AR-19	Altered Tuff	◎						△											
10	AR-20	Altered Andesite	◎	△					△	△										
11	AR-23	Silicified Rock	◎						△			·								
12	AR-24	Altered Tuff	◎						△					·						·
13	AR-25	Altered Tuff	◎						△			·								·
14	AR-26	Altered Tuff	◎								△									·
15	AR-27	Altered Tuff	◎						△					△						
16	AR-28	Altered Tuff	◎						△											△
17	AR-29	Altered Tuff	◎						·											·
18	AR-33	Quartz Vein	◎				○													
19	AR-35	Altered Andesite	◎						△	·		○								
20	AR-38	Altered Andesite	◎						△					·						·
21	AR-39	Altered Andesite	◎						△			△			○					
22	AR-41	Altered Andesite	◎						·			·								△
23	AR-42	Silicified Rock	◎						·											
24	AR-43	Altered Andesite	◎						△			△								
25	AR-44	Andesite	◎	○					·			△			△					
26	CR-01	Silicified Tuff	◎	○					·	·		△								
27	CR-02	Altered Andesite	◎						△					·						
28	CR-04	Tuff	◎						△											
29	CR-06	Tuff Breccia	◎	△					△	·		·								
30	CR-09	Silicified Tuff	◎	◎					·			·								

SYMBOLS

◎ : Abundant ○ : Common △ : Rare · : Tiny ? : Uncertain

Abbreviations

Qz:quartz
Pl:plagioclase
Kf:potash feldspar
Px:pyroxene
Chl:chlorite
Ep:epidote
Mus:muscovite (sericite)
Mon:montmorillonoite
Pyr:Pyrophyllite
Kao:kaolinite
Nac:nacrite
An:anhydrite
Ha:halloysite
Cal:calcite
Dol:dolomite
Sid:Siderite
Py:pyrite
Hem:hematite
Geo:geothite

Appendix 3 Result of X-ray diffraction(2)

	Sample No.	Rock Type	Qz	Pl	Kf	Px	Chl	Ep	Mus	Mon	Pyr	Kao	Nac	An	Cal	Dol	Sid	Py	Hem	Goe
31	CR-13	Slate	◎	・					△			・								
32	CR-16	Altered Slate	◎	・		・			△			・								
33	CR-19	Tuff	◎									△								
34	CR-20	Tuff	◎						△			△								
35	CR-23	Silicified Rock	◎						△											
36	CR-28	Slate	◎	△					△			△							?	
37	CR-32	Silicified Rock	◎		・				△				?	?						
38	CR-34	Silicified Rock	◎						△											
39	CR-36	Rhyorite	◎	・					△											
40	CR-42	Silicified Rock	◎	○					△											
41	CR-44	Tuff	◎	・					△			△			・	○				
42	CR-47	Clay Altered Rock	◎						△											
43	CR-50	Silcified Rock	◎																	
44	CR-56	Tuff	◎						△											△
45	CR-58	Tuff	◎																	
46	CR-67	Clay Altered Rock	◎									△			◎	?			?	
47	CR-70	Clay Altered Andesite	◎						△			・								
48	CR-71	Altered Andesite	◎	○	△				・											
49	CR-75	Altered Andesite	◎	△	○				△											
50	CR-79	Altered Tuff	◎						○			・		・						
51	CR-80	Altered Andesite	◎																	
52	CR-81	Altered Andesite	◎						△			・								
53	CR-82	Altered Andesite	◎									・							△	△
54	CR-83	Altered Andesite	◎						△					・						・
55	CR-84	Altered Andesite	◎						△										△	・
56	CR-87	Altered Tuff	◎						△			△								
57	CR-88	Altered Tuff	◎						△					・						
58	CR-90	Altered Tuff	◎						△			△		・				・		
59	CR-94	Altered Andesite	◎						△			△				△				
60	CR-101	Altered Tuff	◎	・					△			○			・	・			?	

SYMBOLS

◎ : Abundant ○ : Common △ : Rare ・ : Tiny ? : Uncertain

Abbreviations

Qz:quartz
Pl:plagioclase
Kf:potash feldspar
Px:pyroxene
Chl:chlorite
Ep:epidote
Mus:muscovite (sericite)
Mon:montmorillonoite
Pyr:Pyrophyllite
Kao:kaolinite
Nac:nacrite
An:anhydrite
Ha:halloysite
Cal:calcite
Dol:dolomite
Sid:Siderite
Py:pyrite
Hem:hematite
Geo:geothite

Appendix 3 Result of X-ray diffraction(3)

	Sample No.	Rock Type	Qz	Pl	Kf	Px	Chl	Ep	Mus	Mon	Pyr	Kao	Nac	An	Cal	Dol	Sid	Py	Hem	Goe
61	CR-107	Altered Andesite	◎									·								
62	CR-108	Altered Andesite	◎	·					△	△		·								
63	CR-110	Altered Andesite	◎	○					△	△					?					
64	CR-112	Altered Tuff	◎						△			△			○					
65	CR-113	Altered Tuff	◎						△	·		△								
66	CR-114	Altered Tuff	◎						△			△						?		
67	CR-117	Altered Tuff	◎	○					△											
68	CR-120	Altered Andesite	◎						△	·		○								
69	CR-126	Altered Andesite	◎	○					△			○								
70	CR-129	Altered Andesite	◎						△			·								
71	DR-01	Altered Andesite	◎						○			·								
72	DR-02	Altered Tuff	◎						△	·		△								
73	DR-11	Altered Andesite	◎						△											
74	DR-14	Altered Andesite	◎	?					△	○		△								
75	DR-15	Altered Andesite	◎						△	·		○								
76	DR-18	Altered Andesite	◎						△			△					○	?		
77	DR-21	Altered Andesite	◎						△	·		△								
78	DR-25	Altered Andesite	◎						△			·								
79	DR-34	Altered Andesite	◎						△				?							
80	DR-42	Altered Andesite	◎	○	△				△			△						?		
81	DR-45	Altered Andesite	◎						○			?								
82	ER-02	Altered Tuff	◎						△			?		·						·
83	ER-10	Altered Tuff	◎						·										·	△
84	ER-12	Altered Rock	◎						○											
85	ER-13	Andesite	◎						△	△		△								
86	ER-14	Andesite	◎						△			·							·	
87	ER-17	Andesite	◎						△	△		△							·	
88	ER-21	Altered Tuff	◎						○										?	△
89	ER-22	Altered Tuff	◎						△	△										
90	ER-25	Altered Andesite	◎	○	△				△											

SYMBOLS

◎ : Abundant ○ : Common △ : Rare · : Tiny ? : Uncertain

Abbreviations

Qz:quartz
Pl:plagioclase
Kf:potash feldspar
Px:pyroxene
Chl:chlorite
Ep:epidote
Mus:muscovite (sericite)
Mon:montmorillonoite
Pyr:Pyrophyllite
Kao:kaolinite
Nac:nacrite
An:anhydrite
Ha:halloysite
Cal:calcite
Dol:dolomite
Sid:Siderite
Py:pyrite
Hem:hematite
Geo:geothite

Appendix 3 Result of X-ray diffraction(4)

	Sample No.	Rock Type	Qz	Pl	Kf	Px	Chl	Ep	Mus	Mon	Pyr	Kao	Nac	An	Cal	Dol	Sid	Py	Hem	Goe
91	FR-01	Altered Tuff	◎		·				○											
92	FR-03	Altered Tuff	◎						△											
93	FR-07	Altered Andesite	◎						·											
94	FR-14	Altered Andesite	◎						△											
95	GR-07	Altered Andesite	◎						△	·		·								
96	GR-22	Altered Tuff	◎		○				△			·								
97	GR-25	Altered Tuff	◎					○												
98	GR-27	Altered Rhyolite	◎	○	△				△			?								
99	GR-37	Andesite	◎						·	·		△								△
100	GR-38	Andesite	◎	◎	△				△											△
101	GR-44	Andesite	◎						△			△								
102	GR-56	Tuff	◎							·		△		·						
103	GR-61	Altered Andesite	◎							·		△								
104	GR-62	Altered Tuff	◎						○			△		·						
105	HR-05	Andesite	◎	○					·	·		△			○					
106	HR-08	Altered Tuff	◎	○					△			△								
107	HR-10	Altered Tuff	◎						△					·					·	△
108	HR-12	Altered Andesite	◎	○					△			·								
109	HR-13	Altered Rhyolite	◎		△				△											
110	HR-18	Tuff	◎	○					△	△		·								
111	HR-23	Altered Rhyolite	◎	○	△															
112	HR-24	Altered Tuff	◎	○	△				△											
113	HR-35	Rhyolitic Tuff	◎	△	△				△											
114	HR-39	Altered Rock	◎						△											
115	HR-45	Altered Andesite	◎						○			·								·
116	HR-46	Andesite	○						△			△								·
117	HR-47	Andesite	○	△					△			△			△					
118	HR-50	Altered Tuff	◎						△											△
119	HR-51	Tuff	◎						△											·
120	HR-64	Tuff Breccia	○						△			·								△
121	HR-65	Andesite	◎						△	·		△								
122	HR-66	Altered Tuff	◎						○											
123	HR-72	Andesite	◎						△											△
124	HR-77	Altered Rock	◎																	△
125	HR-78	Altered Rock	◎						△										·	
126	HR-79	Altered Andesite	◎	○	△				·			·								
127	HR-89	Andesite	◎	○	△				·			·								

SYMBOLS
◎ : Abundant ○ : Common △ : Rare · : Tiny ? : Uncertain

Abbreviations
Qz:quartz
Pl:plagioclase
Kf:potash feldspar
Px:pyroxene
Chl:chlorite
Ep:epidote
Mus:muscovite (sericite)
Mon:montmorillonoite
Pyr:Pyrophyllite
Kao:kaolinite
Nac:nacrite
An:anhydrite
Ha:halloysite
Cal:calcite
Dol:dolomite
Sid:Siderite
Py:pyrite
Hem:hematite
Geo:geothite

Appendix 4 Soil geochemical data in detailed survey area(1)

No	Element / Unit / Detection limit / Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
1	A-01	21	0.10	35.8	11.6	420	20.0	22.2	19	0.04
2	A-02	3	0.04	21.6	8.2	560	15.5	18.2	32	0.01
3	A-03	3	0.02	14.0	12.6	220	17.5	5.0	32	0.01
4	A-04	1	0.02	5.2	14.4	170	16.5	<0.2	29	0.01
5	A-05	2	0.02	6.2	19.8	140	17.0	<0.2	21	<0.01
6	A-06	2	0.02	6.0	19.6	70	18.0	<0.2	13	0.01
7	A-07	2	<0.02	3.4	6.2	50	18.5	0.6	34	0.01
8	A-08	1	0.02	2.6	7.2	40	13.5	0.6	36	0.01
9	A-09	1	0.02	4.0	10.0	30	12.5	0.2	43	0.01
10	A-10	2	0.02	24.8	5.0	50	15.0	0.4	24	0.01
11	A-11	1	<0.02	4.6	6.4	70	15.0	1.4	30	0.01
12	A-12	2	0.02	3.8	7.2	80	15.0	0.4	44	0.01
13	A-13	1	<0.02	4.0	7.4	100	16.0	<0.2	44	0.02
14	A-14	1	0.02	1.2	9.0	80	15.0	<0.2	65	0.02
15	A-15	3	0.02	2.4	8.6	130	16.0	<0.2	54	0.01
16	A-16	1	0.02	<0.2	8.6	110	14.5	<0.2	46	0.01
17	A-17	<1	<0.02	0.2	10.4	60	14.0	<0.2	59	0.01
18	A-18	1	0.02	<0.2	8.4	130	15.5	<0.2	49	0.01
19	A-19	1	0.02	0.4	11.2	90	15.5	<0.2	54	0.01
20	A-20	<1	<0.02	1.6	7.0	140	19.5	<0.2	41	0.01
21	A-21	1	0.02	0.8	8.6	140	14.0	<0.2	23	0.01
22	A-22	<1	0.02	0.2	6.8	150	13.5	<0.2	31	0.01
23	A-23	1	0.02	1.2	8.6	150	11.5	<0.2	41	0.01
24	A-24	1	0.02	<0.2	6.2	80	14.5	<0.2	57	0.01
25	A-25	<1	0.02	<0.2	3.0	70	14.5	<0.2	45	0.01
26	A-26	1	0.02	<0.2	5.2	40	19.5	<0.2	53	0.01
27	A-27	<1	0.02	<0.2	6.8	40	19.0	<0.2	65	0.01
28	A-28	3	<0.02	<0.2	5.4	30	18.0	<0.2	47	0.01
29	A-29	1	0.02	<0.2	5.4	40	14.0	<0.2	41	0.01
30	A-30	1	0.02	<0.2	6.2	60	15.5	<0.2	46	0.01
31	A-31	<1	0.02	<0.2	4.8	50	14.0	<0.2	38	0.01
32	A-32	<1	0.02	<0.2	5.2	60	12.0	<0.2	50	0.01
33	A-33	1	<0.02	<0.2	5.8	40	9.5	<0.2	53	0.01
34	A-34	4	0.02	0.2	6.4	40	15.0	<0.2	48	0.01
35	A-35	3	0.02	4.2	11.6	50	20.5	0.8	29	0.11
36	A-36	2	0.02	9.4	7.4	50	14.5	<0.2	24	0.01
37	A-37	1	0.02	0.2	9.6	40	11.0	<0.2	42	0.01
38	A-38	<1	0.02	0.6	6.6	20	17.5	<0.2	23	0.01
39	A-39	1	0.02	3.0	7.0	40	14.0	<0.2	24	0.01
40	A-40	2	0.02	0.2	6.6	80	12.0	<0.2	13	0.01
41	A-41	3	0.02	3.0	6.6	60	20.5	1.0	16	0.02
42	B-01	1	0.02	12.6	15.8	200	14.5	4.0	26	0.01
43	B-02	<1	0.02	5.2	19.4	130	17.5	1.6	8	<0.01
44	B-03	<1	0.02	5.8	18.4	170	19.0	0.6	5	<0.01
45	B-04	<1	0.02	4.6	14.8	80	12.0	<0.2	14	0.01
46	B-05	<1	0.02	6.6	23.2	110	16.5	<0.2	37	0.02
47	B-06	<1	0.02	3.2	12.8	60	13.5	<0.2	32	0.01
48	B-07	<1	0.02	3.0	9.6	70	13.5	0.6	47	0.01
49	B-08	1	0.02	2.4	9.2	60	13.0	0.4	33	0.01
50	B-09	<1	0.02	1.2	9.0	70	13.5	0.2	26	0.01
51	B-10	<1	0.02	3.4	9.8	120	14.5	1.2	33	0.01
52	B-11	<1	0.02	1.0	7.8	90	11.0	<0.2	29	0.01
53	B-12	<1	0.02	2.4	8.6	120	12.0	0.4	37	0.01
54	B-13	<1	0.02	1.2	9.4	70	13.5	<0.2	27	0.01
55	B-14	<1	0.04	3.2	13.0	80	22.5	<0.2	56	0.01
56	B-15	<1	0.02	3.4	12.6	100	16.0	<0.2	39	0.01
57	B-16	<1	0.02	4.2	12.6	90	14.0	<0.2	20	0.01
58	B-17	<1	0.04	3.0	10.2	90	20.0	<0.2	70	0.02
59	B-18	<1	0.02	5.2	14.4	90	21.5	<0.2	42	0.02
60	B-19	<1	0.04	4.2	14.6	90	18.0	<0.2	27	0.01
61	B-20	<1	0.02	5.8	12.4	90	17.0	<0.2	13	0.01
62	B-21	<1	0.02	12.6	14.0	80	17.0	<0.2	27	0.03
63	B-22	<1	0.04	5.4	9.6	140	14.5	<0.2	38	0.02
64	B-23	<1	0.06	6.2	12.6	140	14.0	<0.2	43	0.01
65	B-24	<1	0.02	6.8	10.6	120	15.5	<0.2	44	0.01
66	B-25	<1	0.02	3.4	8.8	60	15.5	<0.2	42	0.01
67	B-26	<1	0.02	1.8	10.6	30	12.0	<0.2	47	0.01
68	B-27	<1	0.02	0.2	8.0	20	15.0	<0.2	69	0.01
69	B-28	<1	0.04	0.6	7.0	30	34.5	<0.2	41	0.01
70	B-29	<1	0.04	0.6	8.6	30	17.0	<0.2	77	0.01
71	B-30	<1	0.02	1.0	11.4	20	16.5	<0.2	86	0.01
72	B-31	<1	0.06	1.4	7.2	30	16.5	<0.2	57	0.01
73	B-32	<1	0.02	3.6	10.6	20	18.5	<0.2	62	<0.01
74	B-33	<1	0.02	2.4	5.9	50	13.0	<0.2	42	0.01
75	B-34	<1	0.02	8.2	11.2	90	17.5	0.2	34	0.02
76	B-35	<1	0.02	23.2	16.6	100	23.5	1.8	42	0.01
77	B-36	<1	0.04	16.8	21.0	120	22.5	1.6	51	0.01
78	B-37	<1	0.04	13.4	16.0	120	24.5	0.6	55	0.01
79	B-38	<1	0.04	3.2	19.4	60	13.5	<0.2	111	0.02
80	B-39	<1	0.04	5.4	15.8	60	17.5	<0.2	63	0.01
81	B-40	<1	0.02	1.4	6.8	40	9.0	<0.2	58	0.01
82	B-41	<1	0.02	2.2	8.0	60	11.0	<0.2	31	0.01
83	C-01	5	<0.02	20.2	6.6	70	32.5	7.2	3	<0.01
84	C-02	6	0.02	10.8	16.4	70	30.0	6.8	14	0.01
85	C-03	5	<0.02	9.2	13.0	60	16.0	0.4	23	0.01
86	C-04	1	0.02	2.6	11.8	100	18.5	<0.2	72	0.01
87	C-05	1	0.02	1.0	8.2	80	16.5	<0.2	37	0.01
88	C-06	1	0.02	3.0	13.6	100	18.0	<0.2	45	<0.01
89	C-07	1	<0.02	2.4	10.2	110	19.0	<0.2	64	0.01
90	C-08	2	0.02	4.6	15.0	130	22.0	<0.2	74	0.02
91	C-09	<1	0.02	2.8	12.6	100	18.5	<0.2	45	0.01
92	C-10	1	0.02	5.6	12.8	80	20.5	<0.2	62	<0.01
93	C-11	<1	0.02	0.8	9.6	70	16.5	<0.2	57	0.01
94	C-12	<1	0.02	2.0	6.0	50	17.0	<0.2	32	0.01
95	C-13	<1	0.02	3.6	5.6	70	22.5	<0.2	29	0.02
96	C-14	1	0.02	11.5	8.4	90	27.0	<0.2	31	0.01
97	C-15	<1	0.02	3.4	8.6	100	23.0	<0.2	25	0.01
98	C-16	1	<0.02	4.8	10.6	140	23.0	1.0	13	0.01
99	C-17	<1	<0.02	6.4	11.2	270	24.5	0.8	8	0.01
100	C-18	1	0.10	7.8	33.6	120	35.5	0.4	60	0.01

Appendix 4 Soil geochemical data in detailed survey area(2)

No.	Sample No.	Au ppb	Ag ppm	As ppm	Cu ppm	Hg ppb	Pb ppm	Sb ppm	Zn ppm	S % Total
	Element Unit Detection limit	1	0.02	0.2	0.2	10	0.5	0.2	1	0.01
101	C-19	1	0.02	4.2	14.6	110	16.5	<0.2	21	0.01
102	C-20	1	0.02	5.6	9.2	150	19.5	<0.2	19	0.02
103	C-21	2	0.02	10.8	12.0	160	24.5	0.6	28	0.01
104	C-22	1	0.02	3.2	4.4	110	18.0	<0.2	36	0.01
105	C-23	<1	0.02	2.4	4.2	90	19.5	<0.2	41	0.02
106	C-24	<1	<0.02	3.8	4.8	80	24.0	<0.2	38	0.01
107	C-25	<1	<0.02	1.4	4.6	70	18.5	<0.2	47	0.01
108	C-26	1	<0.02	1.8	3.4	60	15.5	<0.2	45	0.01
109	C-27	<1	<0.02	1.2	9.2	50	12.0	<0.2	36	0.01
110	C-28	<1	<0.02	0.8	8.4	30	13.0	<0.2	56	0.01
111	C-29	1	<0.02	1.4	5.8	60	13.5	<0.2	45	0.02
112	C-30	1	0.02	4.8	12.6	140	12.0	<0.2	52	0.01
113	C-31	2	0.02	6.6	16.0	100	15.5	<0.2	46	0.01
114	C-32	2	<0.02	6.4	14.4	70	15.5	<0.2	62	0.01
115	C-33	1	0.02	6.8	19.0	80	22.0	0.8	43	0.01
116	C-34	2	0.02	6.2	16.4	100	24.5	0.6	38	0.01
117	C-35	2	0.04	9.6	18.8	90	29.5	0.8	47	0.01
118	C-36	1	0.02	7.8	26.8	70	38.0	<0.2	61	0.01
119	C-37	1	0.04	15.4	16.4	80	24.0	<0.2	51	0.01
120	C-38	2	0.04	21.6	31.4	100	20.0	<0.2	75	0.01
121	C-39	2	0.02	7.8	12.0	700	14.5	<0.2	70	0.01
122	C-40	2	0.02	3.4	9.2	310	12.0	<0.2	45	0.01
123	C-41	<1	<0.02	1.4	8.0	90	9.5	<0.2	33	0.01
124	D-01	1	0.02	6.6	8.4	70	16.5	2.8	27	0.01
125	D-02	3	0.04	6.2	13.0	80	15.5	1.6	23	0.01
126	D-03	<1	0.02	3.8	12.2	120	18.0	<0.2	30	0.01
127	D-04	1	0.04	4.8	11.2	10	32.0	<0.2	20	0.01
128	D-05	<1	0.02	2.0	8.0	90	20.0	<0.2	37	0.01
129	D-06	<1	<0.02	2.2	8.0	80	12.0	0.4	31	0.01
130	D-07	<1	0.02	1.6	7.6	40	14.0	<0.2	27	0.01
131	D-08	1	0.02	1.4	5.2	<10	12.5	<0.2	28	0.01
132	D-09	<1	0.02	3.0	9.2	90	16.5	<0.2	38	0.01
133	D-10	<1	0.02	1.8	7.6	10	13.5	<0.2	30	0.01
134	D-11	<1	<0.02	1.4	12.0	60	15.0	<0.2	39	0.01
135	D-12	<1	0.02	0.6	7.4	60	12.5	<0.2	39	0.01
136	D-13	<1	0.02	2.0	8.0	70	16.5	<0.2	30	0.01
137	D-14	1	0.02	6.0	11.2	110	17.0	0.4	21	0.01
138	D-15	1	0.02	0.8	3.6	100	14.5	<0.2	30	0.01
139	D-16	1	<0.02	5.2	8.2	90	18.5	<0.2	21	0.01
140	D-17	<1	0.02	3.4	6.6	70	20.5	<0.2	36	0.01
141	D-18	<1	0.02	1.4	4.6	40	23.0	<0.2	45	0.01
142	D-19	<1	0.02	1.4	6.6	50	21.0	<0.2	48	0.01
143	D-20	<1	0.06	0.4	5.2	60	20.0	<0.2	44	0.01
144	D-21	<1	0.02	0.8	4.8	40	17.5	<0.2	40	0.01
145	D-22	<1	0.02	4.4	8.4	80	15.5	<0.2	40	0.02
146	D-23	<1	0.02	9.4	13.0	190	16.5	0.2	43	0.01
147	D-24	<1	0.02	8.6	11.8	230	13.5	1.4	31	0.01
148	D-25	<1	<0.02	4.4	8.8	240	11.0	1.0	17	0.01
149	D-26	<1	<0.02	1.2	5.0	110	11.5	0.4	22	0.01
150	D-27	<1	0.02	2.8	5.8	110	11.0	0.4	26	0.03
151	D-28	<1	0.02	2.2	6.2	110	13.0	0.4	37	0.01
152	D-29	<1	0.02	1.4	10.6	60	10.0	<0.2	19	0.01
153	D-30	<1	0.02	0.6	6.6	70	11.0	<0.2	28	0.01
154	D-31	<1	0.02	1.6	11.4	70	15.0	0.2	37	0.01
155	D-32	<1	0.02	3.0	13.2	90	15.5	0.2	25	0.01
156	D-33	<1	0.02	3.0	12.4	90	22.0	0.4	23	0.01
157	D-34	<1	<0.02	4.6	14.6	90	22.0	0.4	23	0.01
158	D-35	<1	0.02	6.0	21.2	110	31.5	0.8	38	0.01
159	D-36	<1	<0.02	16.6	14.0	90	14.5	<0.2	42	0.01
160	D-37	<1	<0.02	2.4	8.8	80	11.5	<0.2	52	0.01
161	D-38	<1	0.02	2.0	12.6	30	10.0	<0.2	73	0.01
162	D-39	<1	0.02	1.2	14.6	30	18.0	<0.2	81	0.01
163	D-40	<1	0.02	2.0	9.6	80	13.0	<0.2	84	0.01
164	D-41	1	0.02	25.8	27.4	120	21.5	0.6	47	0.01
165	E-01	1	0.02	4.4	15.2	190	16.5	0.6	24	0.01
166	E-02	1	<0.02	3.0	7.2	260	13.0	0.6	22	0.01
167	E-03	<1	0.02	4.2	8.2	270	15.0	0.4	35	0.01
168	E-04	1	0.02	4.4	7.6	920	16.5	0.4	26	0.01
169	E-05	1	<0.02	4.8	6.6	1660	17.5	0.4	33	0.01
170	E-06	<1	0.02	1.4	9.2	140	16.0	<0.2	40	0.01
171	E-07	<1	<0.02	0.6	8.0	130	14.5	<0.2	34	0.01
172	E-08	<1	<0.02	1.2	7.4	90	15.5	<0.2	35	0.02
173	E-09	1	0.02	3.0	13.8	170	17.0	<0.2	10	0.01
174	E-10	<1	<0.02	2.6	8.8	90	18.0	<0.2	16	<0.01
175	E-11	<1	<0.02	1.2	6.6	80	14.5	<0.2	33	0.01
176	E-12	<1	<0.02	0.8	14.8	70	13.0	<0.2	41	0.01
177	E-13	<1	0.02	0.2	2.6	50	16.0	<0.2	21	0.01
178	E-14	<1	0.02	3.8	4.4	70	14.5	0.2	9	0.01
179	E-15	<1	<0.02	2.0	9.2	60	11.5	0.2	12	0.02
180	E-16	<1	0.08	4.0	7.2	100	13.0	<0.2	19	0.01
181	E-17	<1	0.02	4.0	8.2	120	17.0	<0.2	50	0.01
182	E-18	<1	0.02	0.4	5.8	30	19.5	<0.2	46	0.01
183	E-19	<1	0.02	0.4	4.4	70	19.5	<0.2	45	0.01
184	E-20	<1	0.04	1.4	3.6	40	18.0	<0.2	35	0.01
185	E-21	<1	0.04	1.4	8.2	30	25.0	<0.2	50	0.01
186	E-22	<1	0.02	1.0	5.2	90	19.5	<0.2	45	0.01
187	E-23	<1	0.04	<0.2	7.2	80	16.5	<0.2	53	0.01
188	E-24	1	0.02	2.0	7.2	30	18.0	<0.2	70	0.01
189	E-25	<1	0.02	9.6	9.8	130	15.5	0.4	36	0.01
190	E-26	2	0.02	13.2	12.4	170	17.0	1.0	47	0.01
191	E-27	2	0.04	7.4	25.4	170	21.0	<0.2	70	0.02
192	E-28	1	0.02	4.2	28.4	170	16.0	<0.2	72	0.02
193	E-29	1	<0.02	6.0	14.8	110	18.5	<0.2	49	0.01
194	E-30	1	0.02	5.2	12.8	100	20.5	<0.2	46	0.01
195	E-31	2	0.02	4.6	17.6	80	17.0	<0.2	36	0.01
196	E-32	1	0.02	5.4	15.0	80	16.0	<0.2	35	0.01
197	E-33	2	<0.02	4.8	20.0	100	19.0	<0.2	38	0.01
198	E-34	2	<0.02	5.4	15.8	140	13.0	<0.2	39	0.01
199	E-35	1	0.02	13.0	20.6	170	21.5	0.4	47	<0.01
200	E-36	1	0.02	11.0	10.0	100	18.5	0.2	25	0.01

Appendix 4 Soil geochemical data in detailed survey area(3)

No.	Element Unit Detection limit Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
201	E-37	<1	0.02	6.6	6.4	60	14.5	<0.2	15	0.01
202	E-38	1	0.02	20.0	19.6	100	19.0	0.8	41	0.01
203	E-39	2	0.02	22.6	13.4	60	19.0	0.8	38	0.01
204	E-40	2	0.02	12.4	11.6	80	15.5	0.4	19	0.01
205	E-41	1	0.02	25.6	11.2	100	20.5	1.2	15	0.01
206	F-01	6	0.02	7.8	8.0	400	21.5	4.2	25	0.01
207	F-02	<1	0.02	2.0	4.2	120	28.0	0.8	18	0.01
208	F-03	1	0.04	15.6	8.8	760	22.0	10.0	31	0.01
209	F-04	2	0.02	5.6	14.6	950	18.5	0.8	12	0.01
210	F-05	<1	<0.02	7.0	8.4	1110	20.5	0.6	2	0.01
211	F-06	1	<0.02	6.8	13.0	1550	18.5	0.6	10	0.01
212	F-07	<1	<0.02	1.6	8.0	390	17.5	0.2	41	0.01
213	F-08	<1	0.02	4.4	11.0	330	18.5	0.2	34	0.01
214	F-09	<1	<0.02	3.6	14.8	140	21.5	0.4	35	0.01
215	F-10	<1	<0.02	1.0	10.8	50	12.5	<0.2	45	0.01
216	F-11	<1	<0.02	2.2	10.8	100	18.0	<0.2	51	0.01
217	F-12	<1	0.02	4.8	13.6	100	31.0	<0.2	53	0.01
218	F-13	<1	0.02	1.2	10.2	70	16.5	<0.2	65	0.01
219	F-14	<1	<0.02	3.4	4.4	100	16.5	<0.2	24	0.01
220	F-15	<1	<0.02	2.8	9.0	80	19.0	<0.2	32	0.01
221	F-16	<1	0.02	4.6	10.0	100	18.0	0.2	48	0.01
222	F-17	1	0.02	4.8	12.2	170	12.0	<0.2	47	0.01
223	F-18	1	<0.02	2.4	8.4	40	12.5	<0.2	41	0.01
224	F-19	2	0.02	6.8	11.4	20	15.0	0.2	48	0.01
225	F-20	<1	0.02	6.0	6.6	20	17.5	0.4	32	0.01
226	F-21	<1	<0.02	0.2	6.0	10	11.5	<0.2	44	0.01
227	F-22	<1	<0.02	0.2	4.0	30	13.0	<0.2	33	0.01
228	F-23	<1	0.02	0.2	5.8	20	9.5	<0.2	52	0.01
229	F-24	<1	<0.02	<0.2	6.0	30	13.5	0.2	45	0.01
230	F-25	<1	<0.02	<0.2	5.0	30	16.0	<0.2	55	0.01
231	F-26	<1	0.02	11.0	9.4	340	44.5	2.4	52	0.01
232	F-27	2	<0.02	12.8	10.4	520	17.0	3.2	33	0.01
233	F-28	1	0.02	4.0	11.6	290	22.0	0.8	60	0.01
234	F-29	1	0.02	7.4	11.8	200	23.5	1.2	43	0.01
235	F-30	1	0.04	8.6	12.4	290	29.0	0.6	65	0.01
236	F-31	1	0.02	6.4	10.8	430	18.5	0.4	75	0.01
237	F-32	1	0.02	2.6	9.2	170	18.0	<0.2	74	0.01
238	F-33	<1	0.02	4.4	10.0	80	18.0	<0.2	66	0.01
239	F-34	1	<0.02	4.4	7.8	90	19.5	0.6	43	0.01
240	F-35	<1	0.02	2.2	8.0	130	17.0	0.4	30	0.01
241	F-36	1	0.02	3.8	11.6	180	15.0	0.4	36	0.01
242	F-37	1	0.02	3.0	12.0	190	16.0	0.6	35	0.01
243	F-38	1	0.02	5.6	15.4	210	13.0	1.4	49	0.01
244	F-39	2	0.04	2.6	13.8	210	10.5	2.2	55	0.01
245	F-40	3	0.02	31.6	13.2	210	80.0	4.0	20	0.01
246	F-41	<1	0.02	28.2	12.4	140	60.5	2.6	8	0.01
247	G-01	<1	0.02	0.8	27.0	100	19.5	2.2	27	0.01
248	G-02	<1	0.02	1.4	16.4	160	38.5	1.8	22	0.01
249	G-03	<1	0.02	2.4	2.4	150	32.0	1.0	14	0.01
250	G-04	1	0.02	10.2	6.0	270	20.5	4.8	26	0.02
251	G-05	1	0.02	8.0	4.6	310	18.0	5.4	12	0.02
252	G-06	<1	0.02	16.0	11.0	510	18.0	7.8	8	0.02
253	G-07	<1	0.06	20.6	9.6	870	13.5	9.4	14	0.02
254	G-08	<1	0.02	24.6	11.4	420	17.0	3.0	20	0.02
255	G-09	<1	0.02	10.2	8.4	500	17.5	1.2	29	0.02
256	G-10	2	0.02	1.4	10.8	190	19.0	<0.2	42	0.02
257	G-11	1	<0.02	2.6	15.0	280	16.5	<0.2	47	0.01
258	G-12	<1	0.02	4.0	14.0	230	16.0	<0.2	41	0.02
259	G-13	<1	0.02	3.6	9.4	150	16.5	<0.2	40	0.02
260	G-14	<1	<0.02	0.8	4.4	70	17.0	<0.2	44	0.01
261	G-15	<1	0.02	1.6	5.2	80	15.0	<0.2	60	0.03
262	G-16	1	0.02	3.2	9.2	210	16.5	<0.2	58	0.02
263	G-17	<1	0.02	5.0	11.8	190	13.5	0.2	40	0.01
264	G-18	<1	0.04	3.4	8.0	170	32.0	2.4	41	0.02
265	G-19	<1	0.02	7.0	10.6	110	14.5	0.4	56	0.02
266	G-20	1	0.02	8.4	10.6	110	16.0	0.2	74	0.02
267	G-21	<1	0.02	0.2	5.8	70	13.5	<0.2	62	0.02
268	G-22	<1	<0.02	0.6	5.0	70	9.5	<0.2	49	0.01
269	G-23	<1	0.02	<0.2	5.6	30	13.0	<0.2	45	0.01
270	G-24	<1	<0.02	<0.2	7.4	110	17.5	<0.2	101	0.01
271	G-25	<1	0.02	0.4	5.8	80	15.0	<0.2	73	0.02
272	G-26	1	0.02	17.4	14.0	130	20.5	1.6	70	0.02
273	G-27	<1	0.02	8.2	9.4	250	34.0	1.6	78	0.01
274	G-28	1	0.02	4.4	11.8	240	13.5	<0.2	48	0.02
275	G-29	1	<0.02	1.4	9.4	270	14.5	0.6	61	0.01
276	G-30	1	0.04	2.2	12.6	150	17.5	<0.2	93	0.01
277	G-31	1	0.04	0.8	9.4	330	14.0	<0.2	47	0.01
278	G-32	<1	<0.02	1.8	13.6	230	15.0	<0.2	98	0.01
279	G-33	2	0.02	14.0	15.6	200	23.0	0.6	31	0.01
280	G-34	3	0.06	13.8	19.0	160	19.0	0.8	32	0.01
281	G-35	2	0.02	3.2	13.0	190	11.5	<0.2	39	0.01
282	G-36	1	<0.02	7.4	11.2	530	12.5	0.4	37	0.01
283	G-37	1	0.02	3.6	14.4	180	15.5	<0.2	21	0.01
284	G-38	1	0.02	3.0	11.6	400	14.5	<0.2	50	0.02
285	G-39	2	0.02	3.4	17.4	790	18.5	0.8	65	0.02
286	G-40	1	0.02	0.8	11.4	260	15.0	0.6	55	0.03
287	G-41	1	0.02	9.0	16.2	250	13.5	3.0	44	0.01
288	H-01	4	0.04	5.0	9.4	130	15.5	1.4	54	0.01
289	H-02	<1	0.02	4.6	14.2	130	16.0	1.0	58	0.02
290	H-03	<1	<0.02	3.2	9.2	90	13.5	0.8	37	0.01
291	H-04	<1	<0.02	4.0	12.8	110	13.0	1.0	35	0.01
292	H-05	<1	<0.02	4.6	12.4	130	17.5	1.2	49	0.01
293	H-06	<1	<0.02	7.8	7.4	230	18.5	2.6	25	0.01
294	H-07	<1	<0.02	9.0	6.8	540	17.5	3.4	9	0.01
295	H-08	1	<0.02	10.6	8.0	410	21.0	4.2	14	0.02
296	H-09	<1	<0.02	8.2	13.0	250	22.0	1.4	57	0.01
297	H-10	<1	<0.02	10.8	10.6	170	12.5	0.8	26	0.01
298	H-11	1	<0.02	4.6	14.8	110	12.0	0.8	15	0.01
299	H-12	<1	<0.02	3.2	17.6	130	14.0	0.6	10	0.01
300	H-13	<1	<0.02	3.8	12.4	150	17.0	0.4	11	0.01

Appendix 4 Soil geochemical data in detailed survey area(4)

No.	Element / Unit / Detection limit / Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
301	H-14	<1	<0.02	2.8	18.4	120	15.0	0.2	34	0.01
302	H-15	<1	<0.02	5.4	7.0	190	17.0	0.6	9	0.01
303	H-16	<1	<0.02	4.0	5.4	90	17.0	0.6	19	0.01
304	H-17	<1	<0.02	1.6	11.2	90	15.0	0.2	49	0.02
305	H-18	<1	<0.02	8.2	13.2	100	14.5	0.6	41	0.01
306	H-19	<1	0.02	8.2	8.4	90	13.0	0.8	32	0.01
307	H-20	<1	<0.02	6.4	14.6	80	15.0	1.2	45	0.01
308	H-21	<1	<0.02	0.4	6.4	60	13.5	0.2	47	0.02
309	H-22	<1	<0.02	0.8	5.6	50	11.0	0.2	80	0.02
310	H-23	<1	<0.02	0.6	5.4	40	15.5	0.4	62	0.01
311	H-24	<1	<0.02	0.6	6.6	40	10.0	0.2	73	0.01
312	H-25	<1	<0.02	0.8	7.0	30	9.5	<0.2	82	0.01
313	H-26	1	0.04	1.4	5.8	30	25.0	0.2	56	0.01
314	H-27	<1	0.04	1.4	4.8	40	38.0	0.2	67	0.01
315	H-28	<1	<0.02	1.6	4.0	40	23.0	0.4	43	0.01
316	H-29	<1	<0.02	2.4	4.6	50	24.0	0.6	35	0.01
317	H-30	5	0.02	4.0	3.6	40	20.0	0.4	31	0.01
318	H-31	<1	<0.02	11.2	3.2	70	22.5	0.4	29	0.02
319	H-32	1	<0.02	18.4	16.4	140	14.0	1.2	55	0.01
320	H-33	3	<0.02	5.4	8.0	220	12.5	0.6	45	0.01
321	H-34	1	<0.02	5.8	11.0	220	47.5	0.8	36	0.01
322	H-35	2	<0.02	3.0	10.2	90	22.5	0.8	27	0.02
323	H-36	2	0.02	3.2	11.2	70	24.0	1.2	23	0.01
324	H-37	1	<0.02	2.6	13.2	60	18.5	1.2	19	0.01
325	H-38	5	<0.02	4.4	10.4	100	17.0	0.8	20	0.01
326	H-39	1	<0.02	6.8	19.4	100	14.0	0.8	45	0.01
327	H-40	1	0.02	6.2	18.0	100	15.0	1.6	57	0.02
328	H-41	<1	<0.02	5.0	15.6	80	12.5	1.2	49	0.01
329	I-01	32	0.06	30.4	38.8	70	15.0	6.4	34	0.01
330	I-02	21	0.04	15.2	15.4	60	14.5	6.8	23	0.01
331	I-03	30	0.06	29.4	4.0	90	10.5	5.4	47	0.01
332	I-04	11	0.02	5.4	17.4	40	11.5	3.6	24	0.01
333	I-05	4	0.02	2.0	20.4	70	10.0	3.0	19	0.01
334	I-06	1	0.02	3.0	28.0	60	10.5	4.4	28	0.01
335	I-07	140	0.04	15.2	8.0	110	13.0	4.4	21	0.01
336	I-08	12	<0.02	3.4	19.4	110	10.5	1.8	31	0.02
337	I-09	7	<0.02	3.0	8.6	130	11.5	1.2	29	0.02
338	I-10	1	0.02	7.4	17.2	230	14.5	2.4	24	0.02
339	I-11	<1	0.02	16.0	7.8	630	13.0	3.4	21	0.02
340	I-12	<1	<0.02	4.6	13.4	120	13.0	0.4	43	0.02
341	I-13	<1	<0.02	5.4	14.2	240	12.0	0.4	26	0.02
342	I-14	<1	<0.02	3.4	9.8	150	18.5	0.6	40	0.02
343	I-15	<1	<0.02	4.2	8.6	180	14.5	0.4	14	0.01
344	I-16	<1	<0.02	5.0	9.8	190	14.0	0.6	13	0.01
345	I-17	<1	<0.02	3.0	6.8	170	14.5	0.4	10	0.01
346	I-18	<1	<0.02	4.8	5.6	180	20.0	0.8	8	0.01
347	I-19	<1	<0.02	4.2	4.2	110	17.5	0.8	8	0.01
348	I-20	<1	<0.02	0.8	5.2	70	16.0	0.6	19	0.01
349	I-21	<1	<0.02	1.0	7.0	70	15.0	0.2	54	0.01
350	I-22	<1	<0.02	0.2	4.2	90	13.5	0.2	56	0.02
351	I-23	<1	0.02	1.4	7.0	70	16.5	<0.2	72	0.02
352	I-24	<1	<0.02	0.4	4.4	50	17.0	0.6	37	0.01
353	I-25	<1	<0.02	<0.2	5.6	60	19.0	0.4	39	0.02
354	I-26	<1	<0.02	1.0	3.8	60	16.0	0.2	38	0.02
355	I-27	1	<0.02	1.2	5.2	80	19.5	0.2	38	0.02
356	I-28	<1	0.02	1.8	6.6	80	22.5	0.8	52	0.02
357	I-29	<1	<0.02	7.8	3.4	120	24.5	1.2	38	0.02
358	I-30	<1	<0.02	7.2	2.6	130	17.0	0.8	46	0.01
359	I-31	<1	<0.02	7.4	3.2	130	19.5	1.0	37	0.01
360	I-32	1	0.02	16.6	9.8	140	20.0	1.6	31	0.01
361	I-33	1	0.04	40.2	12.2	240	19.5	1.2	60	0.02
362	I-34	<1	<0.02	4.2	15.0	120	13.0	0.4	35	0.01
363	I-35	1	0.02	3.2	11.2	100	16.5	0.2	68	0.01
364	I-36	1	<0.02	5.6	19.2	150	17.5	0.4	46	0.01
365	I-37	<1	<0.02	5.4	20.6	140	14.0	0.2	73	0.01
366	I-38	<1	<0.02	7.8	20.0	80	19.5	0.4	55	0.01
367	I-39	<1	<0.02	7.4	25.2	40	20.5	0.4	48	0.01
368	I-40	6	<0.02	7.4	18.8	40	16.5	0.6	17	0.01
369	I-41	1	<0.02	7.2	17.6	30	18.5	0.6	15	0.01
370	J-01	16	0.04	10.6	12.4	100	12.0	5.2	26	0.01
371	J-02	13	0.04	10.6	6.4	60	13.0	5.6	24	0.01
372	J-03	16	0.04	11.0	8.2	100	14.5	5.4	21	0.02
373	J-04	1	0.02	2.8	5.4	80	12.5	3.0	29	0.01
374	J-05	<1	0.02	3.0	3.4	70	12.5	2.2	39	0.01
375	J-06	9	0.04	2.8	4.0	70	12.0	3.6	20	0.02
376	J-07	24	0.02	3.4	4.2	70	11.0	2.6	14	0.02
377	J-08	24	0.06	4.6	4.2	60	12.5	3.2	14	0.01
378	J-09	19	0.02	3.4	15.2	150	11.0	2.2	28	0.01
379	J-10	1	0.04	13.0	8.0	460	12.5	5.2	37	0.02
380	J-11	<1	<0.02	10.0	15.6	430	13.0	1.8	21	0.01
381	J-12	<1	0.02	4.4	6.8	630	13.5	1.4	9	0.02
382	J-13	<1	<0.02	5.0	5.0	480	14.0	1.6	7	0.02
383	J-14	1	0.04	8.4	10.8	1000	16.5	1.8	21	0.02
384	J-15	<1	0.02	10.2	12.2	1440	16.0	1.4	25	0.02
385	J-16	<1	0.02	9.2	12.4	530	16.5	0.6	26	0.02
386	J-17	<1	0.02	6.4	19.4	330	16.0	0.2	18	0.02
387	J-18	<1	<0.02	5.8	12.2	240	17.0	<0.2	31	0.01
388	J-19	2	<0.02	3.4	7.2	120	12.0	0.2	29	0.01
389	J-20	<1	0.02	3.8	9.6	150	13.5	0.2	27	0.01
390	J-21	1	0.02	2.6	5.0	130	12.5	<0.2	36	0.01
391	J-22	2	0.02	5.2	13.4	240	15.0	0.4	28	0.01
392	J-23	2	0.02	6.6	12.4	90	13.0	<0.2	28	0.01
393	J-24	3	0.02	3.8	10.2	90	13.0	<0.2	36	0.01
394	J-25	2	0.02	4.0	16.0	210	16.5	<0.2	38	0.02
395	J-26	1	<0.02	3.6	11.6	80	14.0	<0.2	32	0.01
396	J-27	1	0.02	3.4	12.2	70	17.0	<0.2	23	0.01
397	J-28	2	<0.02	4.0	12.4	60	15.5	<0.2	22	0.01
398	J-29	1	0.02	3.2	16.4	70	14.5	<0.2	45	0.01
399	J-30	<1	0.02	5.0	16.8	60	14.0	0.6	50	0.01
400	J-31	1	0.02	3.8	7.6	40	14.5	1.2	25	0.01

Appendix 4 Soil geochemical data in detailed survey area(5)

No.	Element / Unit / Detection limit / Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
401	J-32	1	<0.02	6.0	11.8	50	17.0	0.8	30	0.01
402	J-33	2	0.02	8.4	17.6	70	18.0	0.4	38	0.01
403	J-34	2	0.02	6.6	19.6	90	17.5	<0.2	46	0.01
404	J-35	2	0.02	5.6	15.2	60	14.5	<0.2	44	0.01
405	J-36	2	0.02	6.8	20.6	70	19.5	<0.2	45	0.01
406	J-37	1	0.02	6.4	20.6	70	16.0	<0.2	46	0.01
407	J-38	2	0.02	6.4	19.4	60	22.0	<0.2	50	0.01
408	J-39	1	<0.02	6.6	15.2	50	15.5	0.6	16	0.01
409	J-40	1	0.02	7.2	17.4	60	19.0	<0.2	26	0.01
410	J-41	<1	0.02	7.2	18.6	60	20.5	<0.2	23	0.01
411	K-01	<1	0.02	3.6	7.6	30	17.5	4.8	31	0.01
412	K-02	<1	0.02	3.4	5.6	60	13.0	2.4	84	0.01
413	K-03	2	0.02	7.2	18.4	80	19.0	4.4	21	0.01
414	K-04	5	0.02	10.4	27.6	100	32.5	5.4	38	0.01
415	K-05	2	0.02	5.4	12.2	270	18.5	1.4	78	0.01
416	K-06	3	<0.02	3.2	9.2	60	13.5	3.4	34	0.01
417	K-07	10	0.02	3.6	9.8	60	13.0	4.6	33	0.01
418	K-08	4	0.02	3.4	6.2	100	12.0	3.4	22	0.01
419	K-09	1	<0.02	4.0	11.0	170	9.5	2.4	25	0.01
420	K-10	2	0.04	6.6	4.6	210	14.0	4.4	31	0.01
421	K-11	<1	0.02	4.2	8.2	170	16.0	3.2	35	0.01
422	K-12	<1	0.02	1.6	5.2	90	11.0	1.4	25	0.01
423	K-13	5	0.02	3.8	10.2	150	9.0	1.8	30	0.01
424	K-14	<1	0.02	9.8	3.4	690	18.0	5.2	10	0.01
425	K-15	2	0.02	12.6	4.6	290	19.0	6.4	8	0.01
426	K-16	<1	0.04	5.0	9.8	470	11.5	2.2	42	0.01
427	K-17	4	0.02	4.2	10.8	280	15.0	<0.2	64	0.01
428	K-18	<1	0.02	5.6	6.6	140	20.0	0.2	50	0.01
429	K-19	<1	0.02	8.8	11.8	200	19.5	0.6	37	0.01
430	K-20	<1	0.02	9.8	8.6	240	16.0	0.6	26	0.01
431	K-21	<1	0.02	9.6	11.8	200	23.0	<0.2	40	0.01
432	K-22	<1	<0.02	3.4	3.6	100	15.5	0.2	11	0.01
433	K-23	<1	<0.02	1.4	1.4	60	15.0	<0.2	46	0.01
434	K-24	<1	<0.02	4.6	5.0	70	19.5	<0.2	39	0.01
435	K-25	<1	<0.02	6.8	13.2	100	20.5	0.4	26	0.01
436	K-26	<1	<0.02	7.2	13.0	190	18.5	1.2	32	0.01
437	K-27	<1	0.02	8.2	14.8	150	14.5	0.4	31	0.01
438	K-28	1	0.02	15.6	12.2	80	15.5	1.6	50	0.01
439	K-29	<1	<0.02	12.6	7.6	80	15.0	1.8	46	0.01
440	K-30	<1	<0.02	28.2	14.0	60	17.5	2.4	37	0.01
441	K-31	1	0.02	10.0	15.2	60	20.5	0.6	49	0.01
442	K-32	1	0.04	10.2	17.4	90	15.5	1.8	55	0.01
443	K-33	<1	0.02	6.8	22.6	90	23.0	0.4	54	0.01
444	K-34	<1	0.02	4.2	16.8	250	15.5	1.2	62	0.02
445	K-35	<1	<0.02	4.4	13.2	50	19.0	0.2	20	0.01
446	K-36	<1	0.02	6.8	10.4	40	19.5	0.2	21	0.01
447	K-37	<1	0.02	5.4	13.6	50	20.0	<0.2	12	0.01
448	K-38	<1	0.02	4.6	16.4	30	16.0	0.4	38	0.01
449	K-39	<1	<0.02	8.6	19.8	30	18.0	0.4	40	0.01
450	K-40	2	0.02	7.8	16.8	30	17.0	1.2	44	0.01
451	K-41	6	0.02	6.6	17.0	80	16.0	1.4	51	0.01
452	L-01	<1	0.02	6.2	9.0	40	18.5	1.8	34	0.01
453	L-02	1	0.04	5.2	5.6	30	15.5	2.2	62	0.01
454	L-03	2	0.02	6.6	4.0	20	23.0	1.8	38	<0.01
455	L-04	10	0.02	14.8	27.8	40	24.5	3.6	40	<0.01
456	L-05	2	0.02	7.0	7.0	40	22.0	3.8	46	0.01
457	L-06	1	0.02	4.0	17.2	10	14.5	0.6	82	0.01
458	L-07	1	<0.02	3.4	13.0	40	14.0	3.6	36	0.01
459	L-08	6	0.04	7.0	13.0	90	14.0	4.2	44	0.01
460	L-09	10	0.02	4.6	11.8	160	15.5	1.4	40	0.01
461	L-10	15	0.02	7.0	13.6	130	13.5	2.2	47	0.01
462	L-11	1	0.02	5.4	10.8	180	16.0	1.0	43	0.01
463	L-12	1	<0.02	3.0	10.0	200	8.0	1.4	42	0.01
464	L-13	<1	0.02	4.6	19.0	230	12.5	0.8	42	0.01
465	L-14	1	0.02	7.6	13.6	570	22.5	1.4	24	0.01
466	L-15	<1	<0.02	6.0	8.4	460	12.0	0.8	38	0.01
467	L-16	2	0.02	6.6	12.6	210	20.0	<0.2	33	0.01
468	L-17	1	<0.02	11.8	7.2	310	18.5	2.2	23	0.01
469	L-18	<1	0.02	2.4	1.6	90	27.5	<0.2	26	0.01
470	L-19	<1	0.02	9.0	6.8	250	25.5	1.6	18	0.01
471	L-20	<1	0.02	8.0	13.8	280	11.0	1.0	50	0.01
472	L-21	<1	0.02	9.8	10.0	330	14.0	1.4	57	0.01
473	L-22	<1	0.02	2.8	6.8	110	20.5	<0.2	41	0.01
474	L-23	1	0.02	4.6	7.6	100	15.0	<0.2	22	0.01
475	L-24	<1	0.02	2.4	3.4	80	30.0	<0.2	21	0.01
476	L-25	<1	0.02	2.2	4.0	70	20.5	<0.8	19	0.01
477	L-26	<1	<0.02	5.2	8.0	80	18.5	<0.2	21	0.01
478	L-27	<1	0.02	2.0	7.2	30	17.5	<0.2	42	0.01
479	L-28	<1	0.06	2.4	5.4	30	21.5	<0.2	45	0.01
480	L-29	<1	0.04	1.8	3.8	20	22.5	<0.2	34	0.01
481	L-30	<1	0.02	2.2	4.6	20	21.5	<0.2	32	0.01
482	L-31	<1	0.02	1.8	4.0	30	19.5	<0.2	31	0.01
483	L-32	<1	0.02	1.4	5.0	30	21.5	<0.2	32	0.01
484	L-33	1	0.04	2.2	6.0	50	23.0	<0.2	31	0.01
485	L-34	<1	0.02	6.8	12.2	60	20.5	0.2	29	0.01
486	L-35	<1	0.02	5.8	16.2	80	17.0	0.6	62	0.01
487	L-36	1	0.02	4.8	18.0	50	15.0	0.4	63	0.01
488	L-37	1	0.02	7.6	27.2	60	19.0	0.4	44	0.01
489	L-38	2	0.02	8.0	28.2	70	17.5	0.2	43	0.01
490	L-39	1	<0.02	9.2	29.0	50	16.0	0.2	37	0.01
491	L-40	1	0.02	5.6	13.4	60	15.5	<0.2	40	0.01
492	L-41	1	0.02	7.2	14.4	50	19.0	0.4	25	0.01
493	M-01	1	0.02	4.0	5.4	40	20.5	1.2	28	0.01
494	M-02	1	0.02	5.2	6.0	40	25.0	2.6	20	0.01
495	M-03	6	0.02	6.8	7.4	30	15.5	3.6	25	0.01
496	M-04	13	0.04	5.2	11.4	30	13.0	4.6	39	0.01
497	M-05	9	0.06	6.4	11.8	60	21.0	5.4	65	0.01
498	M-06	11	0.04	10.4	7.4	60	17.5	5.8	32	0.01
499	M-07	3	0.02	8.6	12.8	60	17.0	5.6	23	0.01
500	M-08	6	0.04	11.4	11.0	70	21.5	6.2	23	0.01

Appendix 4 Soil geochemical data in detailed survey area(6)

No.	Element / Unit / Detection limit / Sample No	Au ppb 1	Az ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
501	M-09	7	<0.02	18.0	12.0	90	8.0	5.8	18	0.02
502	M-10	6	0.04	7.0	16.0	90	15.0	5.6	34	0.02
503	M-11	2	0.02	4.4	12.6	220	22.5	2.0	75	0.01
504	M-12	1	0.02	2.6	12.6	160	10.5	1.4	40	0.02
505	M-13	<1	<0.02	3.0	6.8	180	16.0	1.4	23	0.01
506	M-14	<1	0.02	2.6	2.8	350	17.5	0.4	13	0.01
507	M-15	1	0.02	6.6	7.6	1790	15.0	1.4	15	0.01
508	M-16	2	0.02	5.0	5.6	1730	19.5	1.6	22	0.01
509	M-17	1	0.06	5.8	7.6	1250	18.5	0.8	58	0.01
510	M-18	1	0.02	10.0	10.6	890	14.0	1.2	40	0.02
511	M-19	1	0.02	9.6	8.6	280	14.5	2.6	36	0.01
512	M-20	2	0.02	7.2	7.4	260	14.0	2.0	34	0.02
513	M-21	4	0.04	3.4	8.4	210	12.5	0.4	44	0.02
514	M-22	<1	<0.02	7.4	10.2	190	13.5	0.2	55	0.01
515	M-23	<1	0.02	8.6	7.0	200	12.5	0.4	52	0.01
516	M-24	1	0.02	12.0	9.2	150	14.5	0.6	21	0.01
517	M-25	<1	0.02	7.8	12.6	130	15.0	0.4	28	0.01
518	M-26	1	0.02	10.8	21.2	60	18.0	0.4	41	0.01
519	M-27	1	0.02	7.8	19.2	100	14.0	0.2	42	0.02
520	M-28	<1	0.02	9.6	13.8	20	16.5	0.6	33	0.01
521	M-29	<1	0.02	6.0	10.8	20	26.0	0.2	35	0.01
522	M-30	<1	0.02	3.0	5.8	20	27.0	<0.2	35	0.01
523	M-31	<1	0.02	2.6	6.0	30	18.5	<0.2	30	0.01
524	M-32	<1	<0.02	4.4	7.6	50	19.0	0.2	33	0.01
525	M-33	<1	0.02	1.6	5.2	50	19.0	0.2	32	0.01
526	M-34	<1	0.02	5.2	4.6	70	18.0	0.2	22	0.02
527	M-35	1	0.02	8.4	11.8	40	19.0	0.4	29	0.01
528	M-36	1	0.02	5.6	14.2	100	13.5	0.4	19	0.01
529	M-37	1	<0.02	6.6	13.8	60	16.5	0.2	11	0.01
530	M-38	1	<0.02	7.2	16.0	40	19.0	0.2	9	0.01
531	M-39	<1	<0.02	5.6	17.4	90	17.0	0.2	10	0.01
532	M-40	<1	0.02	5.8	16.8	40	17.0	0.2	10	0.01
533	M-41	<1	0.02	6.2	24.2	60	18.0	0.4	19	0.01

Appendix 5 Soil geochemical data in semi-detailed survey area(1)

No.	Element / Unit / Detection limit / Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
1	CS-01	1	0.02	8.6	14.8	60	16.5	2.4	14	<0.01
2	CS-02	2	<0.02	8.4	16.4	70	18.0	0.6	17	0.01
3	CS-03	<1	<0.02	6.4	16.2	50	18.0	0.2	24	<0.01
4	CS-04	<1	<0.02	9.4	23.6	40	18.0	0.2	28	<0.01
5	CS-05	<1	<0.02	6.2	17.6	110	18.0	0.2	13	0.01
6	CS-06	<1	<0.02	10.8	78.0	160	16.5	1.8	35	<0.01
7	CS-07	<1	<0.02	4.2	72.4	30	11.0	<0.2	45	0.01
8	CS-08	<1	0.02	4.8	9.6	30	14.5	<0.2	35	0.01
9	CS-09	1	0.04	4.0	129.0	50	25.5	<0.2	54	0.01
10	CS-10	<1	<0.02	4.4	45.6	70	14.0	0.2	53	0.01
11	CS-11	<1	<0.02	5.2	118.0	70	18.0	1.0	58	<0.01
12	CS-12	<1	0.02	6.2	72.6	140	8.5	<0.2	101	0.01
13	CS-13	<1	0.02	4.4	51.8	70	8.0	<0.2	88	0.01
14	CS-14	<1	0.06	6.4	70.0	100	19.5	2.2	52	0.01
15	CS-15	<1	0.02	4.8	29.2	60	19.0	3.4	46	0.01
16	CS-16	1	0.02	3.6	13.0	20	15.5	<0.2	89	0.01
17	CS-17	43	0.02	38.0	8.0	80	21.0	8.6	44	0.01
18	CS-18	<1	0.02	2.4	4.8	30	14.5	0.6	41	0.01
19	CS-19	1	0.02	9.6	10.0	60	31.5	<0.2	40	0.01
20	CS-20	<1	0.02	3.6	10.8	80	18.5	2.0	59	0.01
21	CS-21	6	0.04	9.8	22.6	80	14.5	3.2	78	0.01
22	CS-22	2	0.02	2.6	7.4	100	10.0	1.8	49	0.01
23	CS-23	<1	0.02	2.6	1.0	120	36.0	<0.2	15	0.01
24	CS-24	6	0.04	3.4	4.6	110	14.0	2.2	53	0.01
25	CS-25	<1	0.04	6.2	1.2	70	39.5	0.8	6	<0.01
26	CS-26	<1	0.02	3.4	1.8	80	39.0	0.8	10	0.01
27	CS-27	<1	0.02	2.6	1.4	50	51.0	<0.2	7	0.01
28	CS-28	<1	0.02	4.8	2.2	30	35.0	0.4	10	<0.01
29	CS-29	26	0.30	67.6	5.8	30	38.0	3.4	21	<0.01
30	CS-30	1	0.02	21.0	23.2	30	12.0	4.6	39	0.01
31	CS-31	<1	0.04	4.4	1.6	60	66.5	0.8	9	<0.01
32	CS-32	<1	0.02	6.6	7.2	80	46.0	1.0	19	0.01
33	CS-33	7	0.02	9.4	7.8	70	11.5	10.6	16	0.01
34	CS-34	1	0.02	8.8	12.0	70	10.0	9.6	49	0.01
35	CS-35	5	0.02	28.0	13.6	210	19.5	12.2	37	0.01
36	CS-36	1	0.02	6.0	16.8	40	10.0	2.4	48	<0.01
37	CS-37	<1	0.02	6.2	15.6	20	11.5	2.6	49	<0.01
38	CS-38	3	0.02	6.8	12.8	30	14.5	2.4	48	0.01
39	CS-39	<1	0.02	5.0	7.2	260	11.5	9.0	17	0.01
40	CS-40	1	0.02	18.8	16.2	90	13.0	30.8	13	0.01
41	CS-41	2	0.02	5.8	9.4	70	11.5	8.0	21	<0.01
42	CS-42	1	<0.02	9.6	9.0	100	11.0	17.6	56	0.01
43	CS-43	7	0.02	9.8	7.4	80	15.0	5.0	29	0.01
44	CS-44	6	0.02	5.4	11.6	80	10.5	5.0	23	0.01
45	CS-45	20	0.06	29.6	10.8	60	15.0	9.2	41	<0.01
46	CS-46	1	<0.02	1.2	12.0	20	7.5	7.6	66	0.01
47	CS-47	1	0.06	0.2	9.2	20	12.5	3.4	83	0.01
48	CS-48	4	0.02	18.6	8.0	80	16.0	12.6	13	0.01
49	CS-49	2	<0.02	9.4	7.8	80	14.5	10.2	20	0.01
50	CS-50	3	<0.02	5.8	8.2	70	14.5	6.6	25	0.01
51	CS-51	2	<0.02	1.2	11.4	50	14.0	9.6	42	0.01
52	CS-52	2	<0.02	2.4	5.4	140	7.0	2.8	17	0.01
53	CS-53	1	0.02	0.6	10.6	50	18.0	1.6	38	0.01
54	CS-54	3	0.04	2.6	12.2	180	15.0	3.6	27	0.01
55	CS-55	<1	<0.02	0.6	12.4	130	11.0	0.8	38	0.01
56	CS-56	<1	0.02	<0.2	43.8	130	13.5	<0.2	32	0.02
57	CS-57	<1	0.02	2.2	38.2	250	10.0	0.6	59	0.01
58	CS-58	<1	0.02	7.2	52.4	2550	10.5	35.0	50	0.01
59	CS-59	<1	0.02	1.8	16.6	80	18.0	<0.2	30	0.01
60	CS-60	<1	0.12	11.2	17.2	60	18.0	1.4	21	0.01
61	CS-61	<1	0.02	4.8	10.2	210	16.0	2.6	23	0.01
62	CS-62	2	0.02	6.0	4.0	100	14.5	2.2	28	0.01
63	CS-63	<1	<0.02	5.2	11.0	210	15.5	<0.2	96	0.01
64	CS-64	<1	0.02	2.2	4.2	30	17.0	0.4	35	0.01
65	CS-65	3	0.02	4.6	6.4	50	20.5	1.8	23	<0.01
66	CS-66	<1	<0.02	1.0	7.8	30	12.0	1.4	15	<0.01
67	CS-67	<1	0.02	1.4	9.8	20	12.0	0.6	12	0.01
68	CS-68	1	<0.02	3.0	29.0	60	11.5	0.2	20	0.01
69	CS-69	<1	0.02	1.2	10.8	40	10.0	0.4	37	0.01
70	CS-70	<1	<0.02	2.2	7.0	340	16.5	0.6	12	0.01
71	CS-71	<1	0.06	1.4	11.4	90	12.5	<0.2	30	0.01
72	CS-72	<1	0.02	2.4	17.0	130	12.0	<0.2	57	0.01
73	CS-73	<1	0.04	7.2	9.2	130	17.5	0.6	29	0.01
74	CS-74	1	0.06	2.4	107.0	90	33.5	<0.2	58	0.01
75	CS-75	1	0.06	10.6	142.5	110	25.0	0.4	42	0.01
76	CS-76	<1	0.06	1.2	117.0	60	20.5	0.4	31	0.01
77	CS-77	<1	0.02	2.0	54.6	60	14.5	<0.2	57	0.01
78	CS-78	<1	0.02	3.4	19.6	30	24.0	0.2	42	0.01
79	CS-79	<1	<0.02	1.6	13.8	20	6.5	0.4	44	0.01
80	CS-80	2	0.02	22.6	6.0	120	13.5	1.6	26	0.01
81	CS-81	2	0.02	6.8	35.0	40	15.0	1.6	61	0.02
82	CS-82	<1	0.02	8.4	21.8	80	14.5	0.4	42	0.01
83	CS-83	9	0.02	3.4	23.2	70	12.5	<0.2	36	0.01
84	CS-84	4	0.02	26.2	2.6	60	16.5	<0.2	36	0.01
85	CS-85	1	0.02	2.8	4.6	40	22.0	<0.2	41	<0.01
86	CS-86	<1	0.02	7.0	6.8	50	13.0	<0.2	47	<0.01
87	CS-87	<1	0.06	11.6	6.2	60	20.0	1.6	49	0.01
88	CS-88	<1	0.02	13.2	1.0	90	17.5	0.2	28	<0.01
89	CS-89	<1	0.02	1.8	2.2	50	16.5	<0.2	34	0.01
90	CS-90	1	<0.02	5.2	30.8	60	15.0	0.2	38	0.02
91	DS-01	<1	<0.02	3.4	22.8	80	14.0	<0.2	26	0.01
92	DS-02	<1	<0.02	3.2	9.2	30	19.5	<0.2	39	0.01
93	DS-03	<1	0.04	4.4	73.8	40	16.5	<0.2	43	0.01
94	DS-04	<1	<0.02	3.4	82.4	150	17.0	<0.2	100	0.01
95	DS-05	1	0.02	2.0	54.0	60	19.5	<0.2	80	0.01
96	DS-06	1	<0.02	5.6	23.4	70	21.0	<0.2	73	0.01
97	DS-07	1	0.02	10.2	14.8	50	19.0	0.6	44	0.01
98	DS-08	<1	0.60	3.0	14.0	60	16.0	<0.2	16	0.01
99	DS-09	1	0.02	2.6	5.6	60	15.5	<0.2	74	0.02
100	DS-10	<1	0.02	0.8	2.4	50	18.5	<0.2	17	0.01

Appendix 5 Soil geochemical data in semi-detailed survey area(2)

No.	Element Unit Detection limit Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
101	DS-11	<1	0.02	3.4	2.6	60	22.0	0.6	20	0.01
102	DS-12	<1	0.02	8.6	6.4	60	19.0	0.6	36	0.01
103	DS-13	1	0.02	5.2	3.0	40	22.5	1.6	11	<0.01
104	DS-14	<1	0.04	4.2	2.6	20	25.0	0.2	29	<0.01
105	DS-15	1	0.04	9.2	2.8	70	21.5	1.2	38	0.01
106	DS-16	<1	<0.02	3.0	6.6	100	11.0	<0.2	92	0.01
107	DS-17	<1	0.02	0.8	10.2	90	8.0	0.2	82	0.01
108	DS-18	<1	0.02	1.6	8.2	60	11.0	0.6	19	0.01
109	DS-19	<1	0.02	3.4	21.6	40	11.0	0.2	43	<0.01
110	DS-20	2	0.02	1.4	34.2	20	19.0	4.0	34	<0.01
111	DS-21	3	0.02	1.2	9.8	20	16.5	1.4	12	<0.01
112	DS-22	2	<0.02	3.4	14.6	20	12.0	1.4	35	<0.01
113	DS-23	2	<0.02	4.8	15.6	30	14.0	0.8	27	0.01
114	DS-24	<1	<0.02	5.0	12.6	40	13.0	0.4	47	0.01
115	DS-25	<1	<0.02	2.8	5.2	40	7.0	1.0	43	0.01
116	DS-26	<1	<0.02	2.8	7.6	100	12.0	0.2	40	0.01
117	DS-27	<1	<0.02	8.6	14.0	60	26.5	2.0	25	0.01
118	DS-28	<1	<0.02	2.6	34.2	60	11.5	2.0	17	0.01
119	DS-29	1	<0.02	9.6	9.2	100	20.5	3.4	17	<0.01
120	DS-30	2	<0.02	2.6	7.0	40	17.0	0.8	44	0.01
121	DS-31	<1	0.02	2.6	1.4	20	22.0	0.2	81	<0.01
122	DS-32	1	0.06	2.6	10.6	40	19.0	<0.2	97	0.01
123	DS-33	<1	0.02	3.4	3.6	30	21.0	0.6	70	0.01
124	DS-34	2	<0.02	3.4	17.8	80	12.0	2.6	37	0.01
125	DS-35	1	0.02	1.6	57.8	50	14.0	1.8	38	0.01
126	DS-36	<1	0.02	2.0	56.6	60	11.0	0.4	48	0.01
127	DS-37	<1	<0.02	1.8	27.8	10	9.5	3.0	32	<0.01
128	DS-38	<1	<0.02	2.8	7.2	40	8.5	4.2	43	<0.01
129	DS-39	1	0.04	5.6	9.4	50	17.5	3.0	36	0.01
130	DS-40	1	0.02	3.0	8.4	60	13.5	1.4	55	0.01
131	DS-41	<1	0.02	4.8	7.2	160	14.0	1.4	38	0.01
132	DS-42	1	<0.02	8.0	10.0	70	18.5	6.0	58	0.01
133	DS-43	<1	<0.02	7.2	2.4	110	23.5	2.0	11	0.01
134	DS-44	<1	0.02	2.8	1.4	40	35.0	0.8	42	0.01
135	DS-45	<1	0.02	4.2	0.8	110	17.5	2.6	22	0.01
136	DS-46	<1	0.04	2.6	0.8	60	30.0	0.8	48	0.01
137	DS-47	1	0.02	8.6	6.8	40	18.0	2.0	13	0.01
138	DS-48	<1	<0.02	3.2	8.6	30	15.0	1.0	8	0.01
139	DS-49	<1	<0.02	3.8	7.4	10	17.5	0.8	7	0.01
140	DS-50	<1	<0.02	3.4	12.8	30	13.5	0.6	13	0.01
141	DS-51	<1	0.02	2.6	0.6	40	30.0	0.4	35	0.01
142	DS-52	<1	0.02	3.6	0.6	20	41.5	0.2	23	0.01
143	DS-53	<1	0.04	3.0	1.4	50	39.5	<0.2	30	0.01
144	DS-54	<1	0.02	6.2	5.0	160	16.5	<0.2	59	0.01
145	DS-55	<1	0.04	7.4	5.8	60	20.5	<0.2	24	0.01
146	DS-56	<1	<0.02	5.6	8.2	80	11.5	<0.2	67	0.01
147	DS-57	<1	0.04	4.8	17.2	80	18.0	0.4	81	0.01
148	DS-58	<1	0.02	2.4	15.0	60	15.5	<0.2	60	0.01
149	DS-59	<1	0.02	2.0	14.8	60	20.0	1.2	25	0.01
150	DS-60	<1	0.02	1.6	11.0	70	15.5	0.2	22	0.01
151	DS-61	<1	0.04	2.4	8.8	60	10.0	0.6	39	0.01
152	DS-62	<1	<0.02	3.4	34.0	40	21.5	<0.2	81	0.01
153	DS-63	<1	0.02	2.6	61.6	60	17.5	<0.2	79	0.01
154	DS-64	6	0.04	2.6	33.2	60	21.0	<0.2	103	0.01
155	DS-65	<1	0.02	1.8	71.8	30	23.0	<0.2	71	0.01
156	DS-66	1	0.04	2.2	80.0	30	24.0	<0.2	71	0.01
157	DS-67	<1	0.06	4.2	60.8	110	12.5	<0.2	125	0.01
158	DS-68	<1	0.04	5.0	91.4	90	23.5	<0.2	53	0.02
159	DS-69	<1	<0.02	10.4	11.4	70	23.5	0.2	14	0.01
160	DS-70	<1	0.06	3.8	6.0	50	17.5	<0.2	39	0.01
161	DS-71	<1	<0.02	3.4	8.8	40	16.5	1.2	13	<0.01
162	DS-72	<1	0.02	3.2	8.4	70	22.5	0.8	22	0.01
163	DS-73	<1	0.02	3.0	3.0	40	12.0	<0.2	13	0.01
164	DS-74	<1	0.02	4.4	20.8	100	10.0	<0.2	17	0.01
165	DS-75	<1	0.02	3.8	73.6	140	12.0	<0.2	29	0.01
166	DS-76	<1	0.02	8.4	27.6	240	11.5	<0.2	32	0.01
167	DS-77	<1	<0.02	2.6	8.4	20	19.0	0.4	48	0.01
168	DS-78	<1	0.06	4.4	59.4	180	13.5	<0.2	27	0.01
169	ES-01	<1	0.02	14.0	4.2	70	33.5	0.8	20	<0.01
170	ES-02	<1	<0.02	43.8	13.6	30	9.0	0.8	32	<0.01
171	ES-03	1	0.02	29.8	7.6	20	12.0	0.4	21	<0.01
172	ES-04	<1	<0.02	25.4	15.2	50	5.0	0.8	12	0.01
173	ES-05	<1	<0.02	32.0	25.4	10	8.0	0.8	17	0.01
174	ES-06	<1	<0.02	9.0	18.8	50	14.0	<0.2	34	0.01
175	ES-07	<1	<0.02	7.2	26.4	30	20.0	6.4	14	<0.01
176	ES-08	<1	<0.02	3.4	3.6	20	8.5	2.0	88	<0.01
177	ES-09	4	0.02	4.2	51.8	30	13.5	4.6	36	0.01
178	ES-10	<1	<0.02	3.8	5.6	20	20.0	3.8	69	0.01
179	ES-11	3	<0.02	4.2	28.2	60	14.5	3.0	41	0.01
180	ES-12	6	<0.02	4.0	9.6	90	15.5	3.8	23	0.01
181	ES-13	1	<0.02	5.4	6.6	80	18.0	4.8	24	<0.01
182	ES-14	28	<0.02	23.8	23.8	120	12.5	10.4	25	0.01
183	ES-15	27	0.02	15.8	19.0	100	13.5	11.0	18	0.01
184	ES-16	<1	<0.02	2.4	13.2	30	15.0	3.0	15	0.01
185	ES-17	27	0.02	6.0	1.8	40	17.5	2.4	11	0.01
186	ES-18	13	0.04	14.0	17.4	70	55.5	5.0	16	0.01
187	ES-19	<1	<0.02	0.6	101.5	10	11.5	3.2	74	<0.01
188	ES-20	<1	<0.02	1.6	7.8	50	20.0	1.4	49	<0.01
189	ES-21	<1	<0.02	3.6	4.6	10	17.5	1.2	58	0.01
190	ES-22	<1	0.02	3.4	3.6	60	17.5	1.2	60	0.01
191	ES-23	<1	0.02	1.0	2.6	30	18.0	1.4	23	0.01
192	ES-24	5	<0.02	3.6	6.4	30	16.5	4.0	12	0.01
193	ES-25	1	<0.02	0.4	10.2	20	20.5	1.8	35	<0.01
194	ES-26	<1	<0.02	1.8	29.2	60	18.0	<0.2	100	<0.01
195	ES-27	<1	<0.02	<0.2	5.8	40	7.5	0.6	29	0.01
196	ES-28	<1	<0.02	<0.2	11.0	30	6.5	0.6	18	<0.01
197	ES-29	<1	<0.02	0.4	29.2	60	13.5	1.6	55	<0.01
198	ES-30	<1	<0.02	0.4	8.6	10	20.5	1.8	17	<0.01
199	ES-31	<1	<0.02	13.0	11.8	70	14.5	1.2	18	<0.01
200	ES-32	<1	<0.02	0.8	9.8	20	13.5	0.4	55	<0.01

Appendix 5 Soil geochemical data in semi-detailed survey area(3)

No.	Element / Unit / Detection limit / Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
201	ES-33	8	<0.02	420.0	5.4	200	21.0	6.4	12	<0.01
202	ES-34	<1	<0.02	8.2	33.2	150	6.0	2.4	21	<0.01
203	ES-35	<1	<0.02	5.2	4.8	70	17.0	6.8	18	0.01
204	ES-36	<1	<0.02	2.0	10.6	40	11.0	3.2	42	<0.01
205	ES-37	1	<0.02	6.4	3.0	130	15.0	6.6	24	<0.01
206	ES-38	<1	<0.02	9.4	1.4	110	17.0	7.2	31	0.01
207	ES-39	1	0.02	2.2	5.4	40	16.5	0.8	19	0.01
208	ES-40	<1	<0.02	5.8	5.8	20	11.0	0.4	21	0.01
209	ES-41	3	0.02	7.4	1.2	40	11.5	<0.2	22	0.01
210	ES-42	1	<0.02	3.0	1.6	20	19.5	0.4	22	<0.01
211	ES-43	<1	<0.02	3.4	1.6	60	15.5	0.2	17	<0.01
212	ES-44	2	0.02	10.6	2.8	30	23.0	0.6	33	0.01
213	ES-45	1	0.02	6.0	49.2	30	12.5	2.2	46	0.01
214	ES-46	1	<0.02	2.6	15.6	30	9.0	0.4	24	<0.01
215	ES-47	<1	<0.02	2.4	16.8	<10	20.0	2.6	29	<0.01
216	ES-48	1	<0.02	<0.2	13.8	80	1.0	2.6	1	0.01
217	ES-49	1	0.02	7.0	6.8	50	30.0	0.2	38	0.01
218	ES-50	<1	0.02	12.4	4.4	80	31.5	0.2	39	0.01
219	ES-51	2	0.02	1.6	124.5	90	23.5	<0.2	54	0.01
220	ES-52	<1	0.02	3.8	74.0	70	12.0	<0.2	19	0.01
221	ES-53	1	0.06	<0.2	57.6	100	8.0	<0.2	15	0.01
222	ES-54	<1	0.12	6.2	81.6	40	21.5	0.4	43	0.01
223	ES-55	<1	0.04	3.4	83.8	120	19.0	0.2	56	0.01
224	FS-01	2	0.02	5.0	19.4	40	14.5	0.2	37	0.01
225	FS-02	2	0.02	10.2	7.4	40	13.5	1.0	66	0.01
226	FS-03	1	<0.02	8.0	13.0	30	5.5	0.2	13	<0.01
227	FS-04	2	0.02	10.6	15.0	20	6.0	<0.2	15	0.01
228	FS-05	1	0.02	21.0	16.4	30	5.5	0.6	18	0.01
229	FS-06	2	0.04	11.2	1.4	40	23.5	<0.2	22	<0.01
230	FS-07	2	0.02	8.4	13.0	40	17.0	0.6	26	0.01
231	FS-08	7	0.02	30.6	9.6	140	33.5	11.4	12	0.01
232	FS-09	2	0.02	3.8	18.0	160	16.5	10.2	33	0.01
233	FS-10	2	0.02	8.2	4.0	100	15.5	16.8	11	0.02
234	FS-11	2	0.06	2.4	18.0	30	12.5	15.8	39	0.01
235	FS-12	2	0.02	0.4	16.0	70	15.0	14.6	28	0.01
236	FS-13	1	<0.02	0.4	17.2	30	12.5	2.6	23	0.01
237	FS-14	1	0.02	0.2	7.2	330	15.5	3.2	17	0.01
238	FS-15	1	<0.02	5.4	3.6	100	23.5	0.8	10	0.01
239	FS-16	2	<0.02	9.6	15.4	110	16.0	1.2	45	0.01
240	FS-17	20	0.02	3.4	10.2	70	13.0	3.0	23	0.02
241	FS-18	8	0.04	4.2	8.6	40	16.0	4.2	26	0.01
242	FS-19	7	<0.02	<0.2	5.0	10	6.5	3.6	14	0.01
243	FS-20	3	0.02	12.2	8.2	140	9.5	2.8	35	0.01
244	FS-21	2	0.02	3.4	11.8	80	11.5	1.6	40	0.01
245	FS-22	2	0.02	0.4	22.6	100	14.0	1.2	19	0.01
246	FS-23	1	0.02	2.4	7.8	40	15.5	1.8	27	0.01
247	FS-24	10	0.02	1.8	12.8	50	13.0	1.8	24	0.01
248	FS-25	1	<0.02	0.2	33.2	60	11.5	2.4	71	0.01
249	FS-26	1	0.02	1.0	6.4	190	11.5	0.4	29	0.01
250	FS-27	1	<0.02	<0.2	6.6	70	9.5	0.6	25	0.01
251	FS-28	13	0.02	6.6	8.0	60	26.0	6.2	10	0.01
252	FS-29	2	0.02	5.4	8.0	110	10.5	8.0	17	0.01
253	FS-30	5	<0.02	4.2	7.4	30	10.5	4.2	27	0.01
254	FS-31	3	0.02	0.2	52.6	80	12.5	1.8	37	0.01
255	FS-32	<1	0.02	0.6	4.6	110	10.0	<0.2	39	0.01
256	FS-33	1	0.02	0.4	5.8	60	8.0	<0.2	30	0.01
257	FS-34	<1	0.02	<0.2	7.4	80	11.0	<0.2	31	0.01
258	FS-35	5	0.06	3.2	10.8	180	13.5	5.6	38	0.01
259	FS-36	3	0.02	8.6	8.8	130	14.0	6.0	34	0.01
260	FS-37	3	0.02	4.6	7.6	300	9.5	5.0	22	0.01
261	FS-38	1	0.02	1.8	7.6	230	10.0	2.2	39	0.01
262	FS-39	1	0.02	3.6	10.0	50	10.5	3.6	61	0.01
263	FS-40	2	<0.02	1.6	6.8	10	12.5	6.6	19	0.01
264	FS-41	13	0.02	2.8	32.0	40	11.0	2.8	25	<0.01
265	FS-42	3	0.02	1.0	8.0	20	7.0	2.8	57	0.01
266	FS-43	2	<0.02	1.0	4.4	50	9.5	0.8	26	0.02
267	FS-44	<1	<0.02	0.6	21.0	20	13.0	1.2	73	0.01
268	FS-45	<1	<0.02	0.4	15.8	40	11.0	12.4	44	0.01
269	FS-46	1	<0.02	1.2	2.8	40	8.5	1.4	45	0.01
270	FS-47	1	0.02	0.8	1.6	40	16.0	0.8	26	0.01
271	FS-48	1	<0.02	<0.2	5.8	20	15.5	0.4	35	0.01
272	FS-49	1	0.02	3.4	11.8	30	16.5	1.0	46	0.01
273	FS-50	1	0.02	13.2	8.8	140	26.0	0.4	35	0.01
274	FS-51	16	0.02	3.6	105.5	30	19.0	0.4	57	0.01
275	FS-52	1	0.02	2.4	104.0	10	19.0	0.4	63	<0.01
276	FS-53	1	0.02	11.6	106.0	740	25.5	0.4	55	0.01
277	FS-54	2	<0.02	2.0	17.8	40	13.0	0.2	44	0.01
278	FS-55	<1	<0.02	1.8	5.4	10	17.0	0.2	88	0.01
279	FS-56	1	0.08	1.2	75.8	60	15.5	<0.2	70	0.01
280	FS-57	2	<0.02	2.4	91.2	50	18.0	1.6	54	0.01
281	FS-58	3	0.04	6.4	5.6	30	20.0	0.6	70	0.01
282	FS-59	1	0.04	6.8	12.8	40	31.0	0.8	21	0.01
283	FS-60	1	0.04	4.2	1.8	30	21.0	0.6	32	0.01
284	FS-61	1	0.06	4.6	10.0	50	24.5	<0.2	23	0.01
285	FS-62	1	0.02	4.2	9.2	60	31.0	0.2	39	0.02
286	FS-63	<1	0.02	3.8	5.2	60	19.0	0.2	25	0.01
287	FS-64	1	0.02	3.4	144.0	120	23.5	0.8	71	0.01
288	FS-65	2	<0.02	7.0	54.6	120	15.0	2.8	32	0.01
289	FS-66	2	0.02	8.0	76.8	310	15.0	0.8	68	0.01
290	GS-01	1	0.02	1.6	10.2	50	12.5	1.0	16	0.01
291	GS-02	<1	<0.02	1.2	11.0	60	15.0	0.6	22	<0.01
292	GS-03	1	<0.02	1.8	9.8	70	9.0	0.2	58	0.01
293	GS-04	<1	0.02	1.4	8.2	50	12.0	0.4	12	0.01
294	GS-05	2	0.04	0.6	8.8	90	18.5	0.8	21	0.01
295	GS-06	<1	0.02	3.0	10.2	100	11.5	1.0	45	0.02
296	GS-07	<1	0.02	0.8	8.0	70	13.5	3.4	17	0.01
297	GS-08	<1	0.02	3.0	4.0	40	10.5	0.4	23	0.01
298	GS-09	<1	0.02	3.6	2.8	60	13.0	1.6	32	0.01
299	GS-10	9	0.04	106.0	3.2	80	18.5	2.0	32	0.01
300	GS-11	12	0.06	63.2	7.8	40	29.5	0.8	61	0.01

Appendix 5 Soil geochemical data in semi-detailed survey area(4)

No.	Element / Unit / Detection limit / Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
301	GS-12	1	0.04	5.2	5.6	30	28.0	1.0	27	0.01
302	GS-13	1	0.02	4.8	1.4	20	21.5	1.2	18	0.01
303	GS-14	1	0.04	15.0	4.6	50	15.0	0.8	52	0.01
304	GS-15	21	0.02	123.0	5.6	90	51.0	2.8	27	0.01
305	GS-16	1	<0.02	1.6	5.8	40	9.0	<0.2	53	0.01
306	GS-17	1	0.02	1.6	3.4	40	15.5	2.6	16	0.01
307	GS-18	1	0.02	1.6	7.2	80	15.5	2.6	28	0.01
308	GS-19	49	0.28	88.6	11.4	30	17.0	3.2	106	0.02
309	GS-20	15	0.06	71.4	36.4	90	14.5	5.8	32	0.02
310	GS-21	<1	0.04	14.4	68.8	40	15.4	4.6	58	0.02
311	GS-22	2	<0.02	10.4	10.0	10	12.0	10.6	36	0.01
312	GS-23	<1	0.02	23.2	37.0	50	10.5	15.4	33	0.01
313	GS-24	<1	<0.02	21.2	35.0	10	8.0	18.4	48	0.01
314	GS-25	<1	0.02	11.8	9.6	60	15.0	12.4	15	0.01
315	GS-26	<1	<0.02	2.6	7.2	30	14.5	1.8	23	0.01
316	GS-27	<1	0.18	8.2	17.2	60	19.5	2.2	35	0.01
317	GS-28	<1	0.02	5.8	15.6	60	17.0	1.2	30	0.01
318	GS-29	4	0.08	19.0	7.4	90	31.0	1.0	26	0.01
319	GS-30	<1	0.04	2.6	0.8	30	21.5	0.2	26	<0.01
320	GS-31	1	0.02	2.8	1.2	40	13.0	2.6	17	0.01
321	GS-32	3	0.02	8.0	8.0	130	11.0	8.8	22	0.01
322	GS-33	<1	<0.02	5.2	10.0	90	7.5	7.0	37	0.01
323	GS-34	<1	<0.02	1.0	21.0	40	11.5	2.0	31	0.01
324	GS-35	<1	<0.02	1.8	3.4	20	12.0	1.8	31	0.01
325	GS-36	1	0.02	4.0	12.0	90	15.5	3.2	19	0.01
326	GS-37	<1	<0.02	5.2	11.8	60	31.5	0.4	40	<0.01
327	GS-38	<1	<0.02	1.8	95.8	30	14.0	1.4	66	0.01
328	GS-39	<1	<0.02	2.0	12.6	30	14.0	1.6	15	0.01
329	GS-40	6	0.02	3.4	11.0	50	11.5	1.6	19	0.01
330	GS-41	2	<0.02	4.2	16.6	30	12.0	3.0	13	0.01
331	GS-42	<1	<0.02	2.2	4.4	120	9.5	0.6	21	0.01
332	GS-43	<1	<0.02	0.8	5.8	60	6.5	0.2	8	0.01
333	GS-44	1	<0.02	2.2	7.4	140	14.0	0.2	8	0.01
334	GS-45	1	<0.02	1.2	8.4	40	12.5	0.6	11	0.01
335	GS-46	<1	0.04	0.4	0.6	20	31.5	<0.2	35	<0.01
336	GS-47	<1	0.02	0.8	0.6	60	34.0	<0.2	25	0.01
337	GS-48	<1	0.04	<0.2	0.6	40	26.0	0.4	29	0.01
338	GS-49	1	0.02	2.4	1.4	70	26.0	0.2	17	0.01
339	GS-50	1	0.04	5.8	30.4	150	11.0	0.6	32	0.01
340	GS-51	<1	<0.02	1.8	57.4	60	12.0	<0.2	95	0.01
341	GS-52	1	0.02	2.0	78.0	90	19.5	0.2	47	0.01
342	GS-53	<1	<0.02	3.2	10.8	40	14.0	0.2	16	0.01
343	GS-54	1	<0.02	2.6	13.8	90	16.0	0.4	20	0.01
344	GS-55	<1	0.02	1.6	55.2	100	12.0	0.4	36	0.02
345	GS-56	<1	0.02	3.0	18.6	80	32.0	0.6	28	0.01
346	GS-57	<1	0.02	3.4	56.4	70	14.5	0.4	42	0.01
347	GS-58	1	0.02	2.2	13.6	200	19.5	1.6	11	<0.01
348	GS-59	<1	0.02	1.0	2.2	50	23.0	0.8	21	0.01
349	GS-60	<1	0.02	6.4	13.2	110	15.0	3.8	13	0.01
350	GS-61	<1	0.02	1.4	19.4	100	11.5	<0.2	28	0.02
351	GS-62	<1	0.04	0.8	78.0	110	11.0	<0.2	28	0.02
352	GS-63	1	0.02	12.8	42.2	320	10.0	0.6	46	0.02
353	GS-64	1	0.02	2.0	127.5	100	18.5	0.2	62	0.01
354	GS-65	1	0.02	2.4	114.0	70	19.0	1.4	33	0.01
355	GS-66	<1	0.04	2.4	3.4	80	13.0	0.6	116	0.01
356	GS-67	<1	0.02	5.4	8.8	70	13.5	0.6	49	0.01
357	GS-68	1	<0.02	3.0	8.4	120	15.0	3.4	13	0.01
358	GS-69	2	<0.02	1.6	81.0	50	16.5	2.2	27	0.01
359	GS-70	<1	0.02	4.8	71.8	70	14.0	11.6	33	0.01
360	GS-71	<1	<0.02	1.0	8.4	50	8.5	1.6	49	0.01
361	GS-72	<1	<0.02	3.2	7.6	120	15.5	2.2	16	0.01
362	GS-73	2	0.02	1.8	49.4	90	10.5	1.2	30	0.02
363	GS-74	<1	0.02	1.8	36.0	60	22.5	0.4	44	0.01
364	GS-75	1	0.02	3.8	51.0	80	16.5	0.4	45	0.01
365	GS-76	<1	0.02	6.8	15.6	400	19.5	<0.2	51	0.01
366	GS-77	<1	<0.02	1.8	14.2	70	10.5	0.2	28	<0.01
367	HS-01	1	<0.02	2.0	29.6	70	9.0	5.2	19	0.01
368	HS-02	1	<0.02	3.2	7.2	110	21.5	3.0	13	0.01
369	HS-03	1	0.02	0.8	7.6	80	12.5	2.0	10	0.02
370	HS-04	<1	0.02	2.2	31.8	80	13.5	3.4	27	0.02
371	HS-05	1	0.02	1.2	103.5	90	22.5	1.6	33	0.01
372	HS-06	1	0.02	10.2	106.0	120	27.0	1.2	42	0.01
373	HS-07	2	0.02	1.8	87.0	50	21.0	0.6	49	0.01
374	HS-08	1	0.02	<0.2	90.6	40	15.5	<0.2	52	0.01
375	HS-09	1	0.02	2.0	19.8	20	29.5	0.2	60	<0.01
376	HS-10	2	0.02	5.6	27.8	50	31.0	1.6	24	0.02
377	HS-11	1	0.02	2.4	12.8	90	22.0	0.6	13	0.01
378	HS-12	1	0.04	3.8	26.4	100	21.5	0.4	44	0.02
379	HS-13	2	<0.02	1.6	6.2	420	12.0	0.4	52	0.01
380	HS-14	2	<0.02	29.0	8.2	180	13.5	0.8	11	0.01
381	HS-15	1	0.02	1.4	5.4	50	20.5	0.4	32	0.01
382	HS-16	<1	0.02	1.4	7.4	60	23.5	0.4	34	0.02
383	HS-17	<1	<0.02	2.8	11.2	120	19.0	0.4	35	0.01
384	HS-18	1	0.02	4.4	9.4	350	15.5	1.2	12	0.02
385	HS-19	1	<0.02	1.2	15.0	580	10.5	<0.2	26	0.02
386	HS-20	1	0.02	0.8	14.0	340	17.5	0.2	57	0.02
387	HS-21	<1	0.02	1.8	3.6	1040	14.0	0.2	6	0.02
388	HS-22	<1	<0.02	1.6	11.6	170	15.5	0.4	30	0.01
389	HS-23	<1	0.02	1.4	4.6	120	17.5	<0.2	22	0.02
390	HS-24	<1	0.02	0.2	0.2	80	13.5	<0.2	7	<0.01
391	HS-25	<1	0.02	1.8	2.0	130	47.0	0.6	7	0.01
392	HS-26	<1	0.02	10.0	8.8	7630	32.0	1.8	31	0.01
393	HS-27	4	0.02	9.0	5.0	100	22.0	1.0	34	0.01
394	HS-28	<1	0.02	5.4	16.6	70	23.5	1.8	44	0.01
395	HS-29	<1	0.02	5.0	3.0	2150	25.0	2.8	32	<0.01
396	HS-30	1	0.02	12.8	2.4	230	26.5	1.4	30	0.01
397	HS-31	1	0.02	2.6	8.0	70	35.5	0.6	30	0.01
398	HS-32	1	0.02	20.8	52.8	30	7.5	0.6	69	0.01
399	HS-33	<1	0.02	0.6	2.6	60	74.0	0.4	11	0.02
400	HS-34	<1	0.04	3.0	3.2	90	22.5	1.2	36	0.01

Appendix 5 Soil geochemical data in semi-detailed survey area(5)

No.	Element / Unit / Detection limit / Sample No.	Au ppb 1	Ag ppm 0.02	As ppm 0.2	Cu ppm 0.2	Hg ppb 10	Pb ppm 0.5	Sb ppm 0.2	Zn ppm 1	S % Total 0.01
401	HS-35	<1	0.02	2.6	4.0	200	19.5	1.2	32	0.01
402	HS-36	1	0.02	3.2	1.8	40	11.0	0.4	22	<0.01
403	HS-37	<1	0.02	3.2	4.0	30	24.5	1.2	66	<0.01
404	HS-38	<1	0.02	3.2	1.2	50	17.5	1.2	23	0.01
405	HS-39	10	<0.02	2.0	14.2	40	14.5	5.0	25	0.01
406	HS-40	3	0.02	2.6	1.6	50	19.0	3.8	4	0.01
407	HS-41	1	<0.02	3.0	5.6	20	23.0	7.8	26	<0.01
408	HS-42	<1	<0.02	1.4	2.6	30	13.5	2.4	49	0.01
409	HS-43	<1	0.02	0.6	5.0	40	13.5	1.4	18	0.01
410	HS-44	6	0.02	3.2	2.8	30	11.5	4.0	22	0.01
411	HS-45	1	0.06	7.8	84.8	40	32.0	1.6	29	0.01
412	HS-46	2	0.04	4.8	5.4	70	43.5	2.2	16	0.01
413	HS-47	2	0.02	0.8	6.6	40	13.5	8.2	18	<0.01
414	HS-48	<1	0.02	0.6	43.6	30	12.0	3.8	49	0.01
415	HS-49	<1	0.02	4.6	11.0	90	15.0	5.8	34	0.01
416	HS-50	1	0.02	1.6	7.6	60	13.0	4.8	17	0.01
417	HS-51	2	0.02	5.4	7.6	110	13.5	5.4	14	0.01
418	HS-52	2	0.02	3.6	4.8	80	11.0	2.8	9	0.01
419	HS-53	1	<0.02	1.6	5.2	70	12.0	2.6	9	0.01
420	HS-54	3	0.04	24.6	17.4	70	20.5	9.6	23	0.01
421	HS-55	1	0.02	3.0	1.8	100	21.0	1.0	15	0.01
422	HS-56	2	0.02	1.0	14.8	50	19.5	3.4	19	0.01
423	HS-57	1	0.04	1.6	6.8	40	20.5	3.6	24	0.01
424	HS-58	<1	<0.02	1.8	25.8	90	10.5	1.2	27	0.01
425	HS-59	<1	0.02	1.4	37.8	80	11.5	0.6	33	0.01
426	HS-60	1	0.04	1.4	30.8	80	13.0	0.4	33	0.01
427	HS-61	<1	<0.02	0.6	7.4	90	7.5	1.6	17	0.01
428	HS-62	1	0.02	1.4	6.8	120	10.0	2.8	26	0.01
429	HS-63	2	<0.02	7.6	18.4	170	24.0	2.8	39	0.01
430	HS-64	1	<0.02	<0.2	35.6	10	10.0	0.6	39	0.01
431	HS-65	1	0.02	1.2	70.2	100	14.0	<0.2	97	0.02
432	HS-66	<1	0.04	<0.2	16.4	120	0.5	<0.2	12	0.01
433	HS-67	2	0.02	<0.2	3.2	60	13.0	<0.2	77	0.01
434	HS-68	1	0.02	3.6	5.6	410	10.0	<0.2	122	0.01
435	HS-69	<1	<0.02	<0.2	1.8	90	12.5	0.2	61	0.01
436	HS-70	<1	0.02	0.2	2.0	60	16.0	0.2	42	0.01
437	HS-71	<1	<0.02	2.0	5.2	60	18.0	0.4	25	0.01
438	HS-72	1	<0.02	1.8	37.2	250	12.0	<0.2	88	0.01
439	HS-73	1	<0.02	4.0	13.6	190	13.0	<0.2	31	0.01
440	HS-74	<1	<0.02	1.4	24.2	30	19.5	0.8	47	<0.01
441	HS-75	1	<0.02	1.4	12.8	40	11.0	0.6	38	0.01
442	HS-76	2	<0.02	<0.2	6.4	60	0.5	2.4	<1	0.01
443	HS-77	1	0.02	1.6	33.2	40	30.5	1.0	50	0.01
444	HS-78	<1	0.02	2.4	15.0	50	21.5	0.6	20	0.01
445	HS-79	<1	0.02	1.8	14.6	30	25.0	0.4	28	0.01
446	HS-80	1	0.02	3.2	23.0	40	18.0	0.4	13	0.01
447	HS-81	<1	0.02	6.0	12.2	70	22.5	0.8	17	0.01
448	HS-82	<1	0.02	1.4	15.2	40	19.0	0.2	35	<0.01
449	HS-83	<1	<0.02	2.6	13.0	50	22.0	0.6	32	0.01

Appendix 6 Ore assay data of rock samples

No	Sample No.	Rock Type	Element	Au	Ag	As	Bi	Cu	Hg	Mo	Pb	Sb	Zn
			Unit	g/t	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm
1	AR-02	Quartz Vein float		<0.005	<0.2	10	<2	4	60	1	8	<2	62
2	AR-05	Quartz Vein		<0.005	<0.2	<2	<2	6	10	<1	28	<2	8
3	AR-09	Quartz Vein		<0.005	<0.2	<2	<2	11	10	<1	20	<2	54
4	AR-22	Hematite-Quartz Vein		<0.005	<0.2	2610	<2	120	8440	1	42	20	406
5	AR-33	Quartz Vein		<0.005	<0.2	4	<2	7	30	1	18	<2	28
6	AR-36	Quartz Vein		<0.005	<0.2	12	<2	12	100	1	30	<2	74
7	AR-40	Quartz Vein		<0.005	<0.2	8	<2	15	40	1	30	<2	26
8	BR-02	Hematite-Quartz Vein		<0.005	<0.2	8	<2	10	30	1	36	<2	54
9	CR-05	Quartz Vein		<0.005	<0.2	4	<2	7	<10	1	22	<2	12
10	CR-12	Siricified Rock		<0.005	<0.2	6	<2	4	<10	3	14	<2	12
11	CR-15	Quartz Vein		<0.005	<0.2	<2	<2	6	<10	1	14	<2	28
12	CR-18	Quartz Vein		<0.005	<0.2	4	<2	12	30	<1	20	<2	26
13	CR-21	Quartz Vein Float		<0.005	<0.2	2	<2	9	10	1	24	<2	16
14	CR-22	Quartz Vein Float		<0.005	<0.2	6	<2	17	70	1	34	<2	24
15	CR-24	Quartz Vein Float		<0.005	<0.2	4	<2	7	20	<1	26	<2	16
16	CR-27	Quartz Vein Float		<0.005	0.2	6	<2	17	20	<1	38	<2	72
17	CR-41	Quartz Vein		<0.005	<0.2	6	<2	12	40	1	46	<2	40
18	CR-43	Quartz Vein Float		<0.005	<0.2	6	<2	13	30	1	52	<2	32
19	CR-46	Quartz Vein Float		<0.005	<0.2	2	<2	8	20	<1	46	<2	52
20	CR-50	Silicified Rock		0.995	1.8	96	<2	12	70	<1	236	22	30
21	CR-53	Quartz Vein Float		5.630	3.6	5530	<2	57	10630	<1	770	128	266
22	CR-54	Quartz Vein Float		0.010	<0.2	12	<2	14	30	<1	28	<2	36
23	CR-64	Quartz Vein Float		0.015	<0.2	4	<2	8	40	2	2	<2	8
24	CR-77	Quartz Vein		<0.005	<0.2	<2	<2	3	<10	1	2	<2	20
25	CR-89	Quartz Vein		<0.005	<0.2	4	<2	4	<10	1	<2	<2	32
26	DR-03	Quartz Vein		<0.005	<0.2	26	<2	16	90	<1	62	<2	106
27	DR-13	Quartz Vein		<0.005	<0.2	4	<2	9	20	<1	32	<2	36
28	DR-20	Quartz Vein		<0.005	<0.2	14	<2	19	60	<1	52	<2	90
29	DR-29-3	Quartz Vein		<0.005	<0.2	<2	<2	3	<10	1	<2	<2	2
30	DR-32	Quartz Vein		<0.005	<0.2	2	<2	8	10	2	6	<2	8
31	DR-42	Silicified Andesite		<0.005	<0.2	2	<2	1	<10	1	4	<2	56
32	FR-08	Silicified Rock		<0.005	<0.2	<2	<2	7	<10	1	<2	<2	6
33	GR-05	Quartz Vein		<0.005	<0.2	4	<2	8	10	<1	30	<2	42
34	GR-17	Quartz Vein		<0.005	<0.2	10	<2	3	90	3	6	<2	12
35	GR-20	Quartz Vein		0.020	0.4	80	<2	7	160	2	34	2	18
36	GR-21	Altered Ryolite		0.020	0.4	52	<2	13	30	5	18	<2	18
37	GR-32	Quartz Vein		<0.005	<0.2	6	<2	10	20	1	42	<2	22
38	HR-09	Quartz Vein		<0.005	<0.2	2	<2	6	20	<1	24	<2	12
39	HR-11	Altered Tuff		<0.005	<0.2	34	<2	73	60	<1	26	<2	430
40	HR-38	Altered Andesite		<0.005	<0.2	2	<2	6	20	1	22	<2	28
41	HR-80	Altered Andesite		<0.005	<0.2	18	<2	5	20	<1	2	54	1175
42	HR-92	Silicified Rock		<0.005	<0.2	20	<2	2	20	1	12	<2	12

Appendix 7 Chemical and normative compositions of rock samples

Sample No.	AR-04	AR-14	CR-10	DR-06	DR-23	ER-11	FR-02	GR-12	GR-24	HR-06	HR-24	HR-25	HR-54
SiO2(%)	57.10	53.29	57.04	48.99	66.88	58.93	58.82	58.12	50.76	52.73	72.33	69.64	56.61
TiO2(%)	0.81	1.20	0.81	1.48	0.39	0.80	0.79	0.76	1.16	1.60	0.27	0.42	0.79
Al2O3(%)	16.14	16.48	16.36	16.48	14.28	16.68	16.47	16.04	17.18	16.50	12.70	13.86	16.23
Cr2O3(%)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01
Fe2O3(%)	1.87	3.65	1.78	4.18	1.79	1.52	1.00	1.68	3.99	2.49	1.64	4.13	1.68
FeO(%)	5.27	4.98	5.35	6.24	3.10	5.20	5.75	4.89	6.89	5.62	0.21	0.21	5.35
MnO(%)	0.13	0.16	0.16	0.16	0.08	0.18	0.12	0.13	0.19	0.10	0.01	0.03	0.12
MgO(%)	3.51	4.47	3.54	3.67	0.46	3.03	3.06	3.15	4.82	1.61	0.19	0.50	3.87
CaO(%)	5.92	7.69	5.54	9.24	2.35	5.90	6.04	6.03	8.83	7.13	0.22	1.39	5.44
Na2O(%)	3.42	3.58	3.44	2.50	4.59	3.09	3.08	2.91	2.40	3.77	4.08	3.27	4.07
K2O(%)	1.62	0.63	2.15	0.74	3.13	1.33	1.41	2.44	1.02	1.24	3.01	3.94	1.39
P2O5(%)	0.17	0.29	0.17	0.32	0.09	0.20	0.21	0.16	0.29	0.79	0.04	0.08	0.16
H2O+(%)	2.86	1.91	2.67	2.40	1.26	1.54	1.88	2.35	1.84	2.40	0.94	1.03	2.68
H2O-(%)	0.20	0.17	0.20	0.22	0.08	0.10	0.12	0.14	0.24	0.31	0.28	0.20	0.16
LOI(%)	2.70	2.17	2.40	4.72	1.45	1.98	1.85	2.19	1.51	5.77	1.52	1.50	2.81
TOTAL	99.25	99.15	99.34	99.41	98.94	99.41	99.24	99.05	99.82	99.98	96.24	99.01	99.12
Ba(ppm)	455	300	485	280	550	470	425	450	580	465	845	850	365
Rb(ppm)	52	16	78	28	118	36	36	86	26	68	104	146	48
Sr(ppm)	366	574	652	554	328	410	402	476	440	592	164	458	562
Nb(ppm)	10	12	10	12	26	12	12	10	6	36	22	18	10
Zr(ppm)	117	159	117	150	321	150	144	120	114	450	330	288	117
Y(ppm)	22	24	22	28	48	26	26	22	22	56	48	72	22
CIPW. NORM													
Q	11.3	7.7	9.56	7.21	21.46	16	15.01	12.85	5.96	9.21	36.44	32.04	8.16
C	-	-	-	-	-	-	-	-	-	-	2.43	1.88	-
or	9.57	3.72	12.71	4.37	18.5	7.86	8.33	14.42	6.03	7.33	17.79	23.28	8.21
ab	28.94	30.29	29.11	21.15	38.84	26.15	26.06	24.62	20.31	31.9	34.52	27.67	34.44
an	23.9	27.04	22.85	31.56	9.12	27.71	26.95	23.5	33.09	24.44	0.83	6.37	21.91
di	2.1	5.5	1.68	6.38	0.44	0.11	0.69	2.55	4.6	2.14	-	-	1.99
hd	1.48	1.92	1.22	3.56	1.24	0.09	0.68	1.87	2.6	2.7	-	-	1.32
en	7.77	8.58	8.04	6.18	0.94	7.5	7.3	6.66	9.88	3.02	0.47	1.25	8.72
fs	6.25	3.43	6.67	3.96	3.06	7.26	8.29	5.59	6.41	4.37	-	-	6.65
mt	2.71	5.29	2.58	6.06	2.6	2.2	1.45	2.44	5.78	3.61	-	-	2.44
ht	-	-	-	-	-	-	-	-	-	-	1.64	4.13	-
il	1.54	2.28	1.54	2.81	0.74	1.52	1.5	1.44	2.2	3.04	0.46	0.51	1.5
ru	-	-	-	-	-	-	-	-	-	-	0.03	0.15	-
ap	0.39	0.67	0.39	0.74	0.21	0.46	0.49	0.37	0.67	1.83	0.09	0.19	0.37
Total	95.96	96.42	96.34	94	97.14	96.86	96.75	96.31	97.53	93.58	94.7	97.47	95.71
Felsic	73.72	68.75	74.23	64.3	87.92	77.72	76.36	75.39	65.39	72.87	92	91.25	72.73
Mafic	22.24	27.67	22.11	29.7	9.22	19.14	20.39	20.92	32.14	20.71	2.7	6.22	22.98

Appendix 8 Homogenization temperature of fluid inclusions(1)

sample no.	grain no.	mineral	H.T. (℃)	size (μm)	occurrence	remarks
AR－33	1	quartz	139	10*3	primary	
	2	quartz	133	8*3	primary	
	2	quartz	129	9*4	primary	
	3	quartz	131	8*3	primary	
	4	quartz	150	10*4	primary	
	4	quartz	158	10*4	primary	
	5	quartz	92	8*3	primary	
	6	quartz	146	11*5	primary	
	7	quartz	101	8*3	primary	
	8	quartz	154	12*5	primary	
	8	quartz	147	10*4	primary	
	9	quartz	107	10*3	primary	
	9	quartz	146	12*6	primary	
	10	quartz	144	5*3	primary	
	10	quartz	147	13*3	primary	
	11	quartz	120	15*10	primary	
	11	quartz	148	9*6	primary	
	11	quartz	153	7*3	primary	
	12	quartz	149	13*10	primary	
	12	quartz	151	13*7	primary	
	12	quartz	145	15*7	primary	
	12	quartz	165	8*7	primary	
	12	quartz	142	15*5	primary	
	13	quartz	151	14*5	primary	
	13	quartz	142	10*4	primary	
	14	quartz	141	5*3	primary	
	14	quartz	151	13*3	primary	shadow in the inclusion
	14	quartz	126	14*8	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(2)

sample no.	grain no.	mineral	H.T. (°C)	size (μm)	occurrence	remarks
AR-40	1	quartz	132	5*4	primary	
	1	quartz	137	7*3	primary	
	1	quartz	126	7*5	primary	
	2	quartz	168	10*3	primary	
	3	quartz	119	6*4	primary	
	3	quartz	121	4*4	primary	
	3	quartz	126	6*4	primary	
	3	quartz	123	18*5	primary	
	3	quartz	129	6*3	primary	
	4	quartz	130	12*5	primary	
	4	quartz	128	6*4	primary	
	4	quartz	126	6*3	primary	
	5	quartz	114	8*4	primary	
	5	quartz	108	6*3	primary	
	6	quartz	136	13*2	primary	
	6	quartz	134	13*3	primary	
	7	quartz	143	12*4	primary	
	7	quartz	127	13*6	primary	
	8	quartz	160	6*4	primary	
	8	quartz	166	10*3	primary	
	8	quartz	171	4*2	primary	
	9	quartz	168	15*3	primary	
	9	quartz	163	14*8	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(3)

sample no.	grain no.	mineral	H.T. (℃)	size (μm)	occurrence	remarks
BR-02	1	quartz	148	3*1	primary	
	1	quartz	150	3*2	primary	
	1	quartz	154	3*2	primary	
	2	quartz	146	5*2	primary	
	2	quartz	157	4*3	primary	
	2	quartz	165	4*2	primary	
	2	quartz	168	4*2	primary	
	2	quartz	151	4*2	primary	
	3	quartz	143	6*3	primary	
	3	quartz	163	8*3	primary	
	3	quartz	177	4*3	primary	
	4	quartz	177	4*3	primary	
	4	quartz	136	4*2	primary	
	4	quartz	152	2*2	primary	
	4	quartz	156	3*2	primary	
	4	quartz	156	4*3	primary	
	4	quartz	146	4*2	primary	
	4	quartz	171	4*1.5	primary	
	4	quartz	157	6*3	primary	
	4	quartz	186	4*2	primary	
	5	quartz	159	6*2	primary	
	5	quartz	146	5*3	primary	
	5	quartz	161	4*1	primary	
	5	quartz	147	3*1.5	primary	
	6	quartz	129	5*3	primary	
	6	quartz	123	3*2.5	primary	
	6	quartz	118	3*2	primary	
	6	quartz	126	2*2	primary	big bubble
	6	quartz	139	4*2	primary	
	6	quartz	153	7*3	primary	
	6	quartz	109	5*3	primary	
	6	quartz	142	3*2	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(4)

sample no.	grain no.	mineral	H.T. (°C)	size (μm)	occurrence	remarks
CR-15	1	quartz	278	3*2	primary	
	1	quartz	275	3*2	primary	
	2	quartz	292	3*2	primary	blackish colored in all
	3	quartz	306	3*2.5	primary	
	3	quartz	238	3*1.5	primary	
	4	quartz	158	5*1	primary	
	4	quartz	173	5*1	primary	
	4	quartz	143	3*2	primary	
	4	quartz	148	5*1.5	primary	
	4	quartz	126	3.5*2.5	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(5)

sample no.	grain no.	mineral	H. T. (°C)	size (㎛)	occurrence	remarks
CR－18	1	quartz	162	5*2	primary	
	1	quartz	183	10*2	primary	
	1	quartz	179	5*3	primary	
	2	quartz	223	6*3	primary	
	2	quartz	239	6*3	primary	
	3	quartz	245	10*6	primary	
	3	quartz	247	10*4	primary	
	3	quartz	248	11*6	primary	
	3	quartz	247	9*6	primary	
	3	quartz	263	20*6	primary	
	3	quartz	202	8*6	primary	
	4	quartz	249	3*2	primary	
	4	quartz	247	4*2	primary	
	4	quartz	243	4*1	primary	
	4	quartz	205	3*1.5	primary	
	4	quartz	182	2.5*1.5	primary	
	4	quartz	198	1.5*1.5	primary	
	5	quartz	176	3*2.5	primary	
	5	quartz	172	4*2	primary	
	5	quartz	157	1.5*1.5	primary	
	5	quartz	186	3*2.5	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(6)

sample no.	grain no.	mineral	H.T. (°C)	size (μm)	occurrence	remarks
CR-21	1	quartz	111	3*1.5	primary	
	2	quartz	131	1.5*1.5	primary	
	2	quartz	132	3*1	primary	
	2	quartz	124	3*2	primary	
	2	quartz	140	3*1.5	primary	
	3	quartz	113	5*2	primary	
	3	quartz	126	3.5*1.5	primary	
	4	quartz	127	4*1.5	primary	
	4	quartz	128	2.5*2	primary	
	4	quartz	123	6*2	primary	
	5	quartz	117	2.5*2	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(7)

sample no.	grain no.	mineral	H. T. (°C)	size (μm)	occurrence	remarks
CR－24	1	quartz	149	2.5*1.5	primary	
	1	quartz	170	2.5*0.5	primary	
	1	quartz	142	1.5*1	primary	
	1	quartz	143	2.5*1.5	primary	
	1	quartz	151	2*2	primary	
	1	quartz	147	2*1	primary	
	2	quartz	127	3*2	primary	
	2	quartz	141	2*0.5	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(8)

sample no.	grain no.	mineral	H. T. (°C)	size (μm)	occurrence	remarks
CR－27	1	quartz	130	5*3	primary	
	1	quartz	162	6*3	primary	blackish colored in all
	2	quartz	145	5*3	primary	
	2	quartz	175	6*2.5	primary	
	2	quartz	122	6*2.5	primary	
	3	quartz	145	3.5*3	primary	Brownian movement at a normal temperature
	3	quartz	138	3.5*2	primary	Brownian movement at a normal temperature
	3	quartz	126	5*3	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(9)

sample no.	grain no.	mineral	H. T. (℃)	size (μm)	occurrence	remarks
CR－43	1	quartz	126	6*5	primary	Brownian movement at a normal temperature
	1	quartz	130	5*4	primary	Brownian movement at a normal temperature
	1	quartz	121	8*6	primary	
	1	quartz	136	6*3	primary	
	1	quartz	117	6*4	primary	Brownian movement at a normal temperature
	1	quartz	123	7*3	primary	
	2	quartz	137	7*3	primary	Brownian movement at a normal temperature
	2	quartz	122	7*2.5	primary	Brownian movement at a normal temperature
	3	quartz	131	7*2	primary	Brownian movement at a normal temperature
	3	quartz	134	5*3	primary	Brownian movement at a normal temperature
	3	quartz	139	8*2	primary	
	4	quartz	268	7*3	primary	
	4	quartz	122	6*2.5	primary	
	5	quartz	109	6*2	primary	
	5	quartz	250	6*3	primary	
	5	quartz	184	8*1.5	primary	
	5	quartz	132	5*2	primary	
	5	quartz	119	8*2	primary	blackish colored in all
	6	quartz	206	6*2	primary	partially shadow in the inclusion
	6	quartz	232	6*4	primary	
	7	quartz	105	6*2.5	primary	
	7	quartz	106	5*2	primary	
	7	quartz	112	6*3	primary	
	7	quartz	137	5*3	primary	partially shadow in the inclusion
	7	quartz	119	5*3	primary	
	7	quartz	120	5*3	primary	
	7	quartz	94	7*3	primary	
	7	quartz	118	5*3.5	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(10)

sample no.	grain no.	mineral	H.T. (°C)	size (μm)	occurrence	remarks
CR-53	1	quartz	117	8*3	primary	Brownian movement at a normal temperature
	2	quartz	138	6*5	primary	Brownian movement at a normal temperature
	3	quartz	131	5*2	primary	Brownian movement at a normal temperature
	4	quartz	127	7*2	primary	Brownian movement at a normal temperature
	5	quartz	117	9*2	primary	Brownian movement at a normal temperature
	6	quartz	176	5*3	primary	Brownian movement at a normal temperature
	6	quartz	161	7*2	primary	Brownian movement at a normal temperature

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(11)

sample no.	grain no.	mineral	H. T. (°C)	size (μm)	occurrence	remarks
CR-77	1	quartz	249	2*2	primary	
	1	quartz	213	3*2	primary	
	1	quartz	210	2*2	primary	
	2	quartz	207	3*2	primary	
	3	quartz	220	2*2	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(12)

sample no.	grain no.	mineral	H. T. (°C)	size (μm)	occurrence	remarks
DR-03	1	quartz	418	10*2	primary	bubble is comparatively big
	1	quartz	133	10*2	primary	Brownian movement at a normal temperature
	1	quartz	134	8*5	primary	Brownian movement at a normal temperature
	1	quartz	138	10*2	primary	Brownian movement at a normal temperature
	1	quartz	126	6*6	primary	Brownian movement at a normal temperature
	1	quartz	130	8*2	primary	Brownian movement at a normal temperature
	2	quartz	309	8*5	primary	
	2	quartz	336	5*5	primary	
	3	quartz	352	9*3	primary	
	3	quartz	357	9*3	primary	
	3	quartz	336	8*2	primary	
	3	quartz	297	8*2	primary	
	3	quartz	314	10*3	primary	
	4	quartz	352	7*4	primary	
	4	quartz	282	7*4	primary	
	4	quartz	320	8*3	primary	
	4	quartz	297	6*3	primary	
	4	quartz	306	8*3	primary	relief is not clear
	5	quartz	185	5*2	primary	
	5	quartz	183	6*2	primary	
	5	quartz	239	6*2	primary	
	5	quartz	304	5*2	primary	
	5	quartz	240	5*2	primary	
	6	quartz	154	6*2	primary	
	6	quartz	149	5*2	primary	
	6	quartz	133	4*2.5	primary	
	6	quartz	156	7*2.5	primary	
	6	quartz	142	5*3.5	primary	
	7	quartz	182	5*3.5	primary	relief is not clear
	7	quartz	168	6*2	primary	relief is not clear
	7	quartz	181	6*3.5	primary	relief is not clear

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(13)

sample no.	grain no.	mineral	H. T. (°C)	size (μm)	occurrence	remarks
DR-29-3	1	quartz	150	8*3	primary	
	1	quartz	153	3*1	primary	
	2	quartz	163	8*3	primary	
	3	quartz	148	8*3	primary	
	4	quartz	160	4*2	primary	
	5	quartz	193	7*2	primary	
	6	quartz	173	6*2.5	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(14)

sample no.	grain no.	mineral	H.T. (℃)	size (μm)	occurrence	remarks
GR-05	1	quartz	134	8*3	primary	
	1	quartz	143	5*2.5	primary	
	1	quartz	139	6*2	primary	
	2	quartz	203	7*2	primary	bubble is comparatively big
	2	quartz	214	8*2.5	primary	bubble is comparatively big
	2	quartz	182	7*3	primary	bubble is comparatively big
	2	quartz	200	6*2	primary	bubble is comparatively big
	2	quartz	207	7*2	primary	bubble is comparatively big
	3	quartz	158	10*2	primary	bubble is comparatively small
	3	quartz	136	9*3	primary	bubble is comparatively small
	3	quartz	130	3*3	primary	bubble is comparatively small
	3	quartz	160	7*3	primary	bubble is comparatively small
	3	quartz	156	6*3	primary	bubble is comparatively small
	3	quartz	179	7*2.5	primary	bubble is comparatively small
	3	quartz	150	3.5*3	primary	bubble is comparatively small
	3	quartz	159	12*5	primary	bubble is comparatively small
	4	quartz	195	7*5	primary	
	4	quartz	156	8*3	primary	relief is not clear
	4	quartz	169	6*2.5	primary	
	4	quartz	166	3.5*3	primary	
	4	quartz	161	8*4	primary	
	5	quartz	162	6*2	primary	
	5	quartz	154	8*2	primary	
	5	quartz	173	5*3	primary	including halite:H.T means the temperature of
	5	quartz	185	6*3	primary	disappearance of bubble
	5	quartz	166	6*2.5	primary	
	6	quartz	179	6*2.5	primary	
	6	quartz	165	6*2	primary	
	6	quartz	193	5*2.5	primary	
	6	quartz	192	5*2	primary	
	6	quartz	172	8*3	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(15)

sample no.	grain no.	mineral	H.T. (°C)	size (μm)	occurrence	remarks
GR-32	1	quartz	136	6*2	primary	Brownian movement at a normal temperature
	1	quartz	143	6*2	primary	Brownian movement at a normal temperature
	1	quartz	273	5*2	primary	
	1	quartz	294	3*1.5	primary	
	2	quartz	136	7*2.5	primary	Brownian movement at a normal temperature
	2	quartz	128	6*3.5	primary	Brownian movement at a normal temperature
	2	quartz	138	5*2	primary	Brownian movement at a normal temperature
	2	quartz	149	4*1.5	primary	
	2	quartz	146	4*1.5	primary	
	2	quartz	133	4*2.5	primary	
	3	quartz	137	5*2	primary	
	3	quartz	130	6*2	primary	
	3	quartz	126	5*1.5	primary	
	3	quartz	141	6*2	primary	
	4	quartz	140	6*3	primary	
	4	quartz	137	4*2	primary	
	4	quartz	137	4*2.5	primary	
	4	quartz	128	7*2	primary	
	4	quartz	123	4*2	primary	
	4	quartz	126	8*2	primary	
	4	quartz	130	5*2	primary	
	4	quartz	123	7*2	primary	
	5	quartz	274	8*1.5	primary	
	5	quartz	131	6*2.5	primary	
	5	quartz	126	6*2	primary	
	5	quartz	130	7*3	primary	
	5	quartz	141	4*2	primary	
	5	quartz	142	3*3	primary	
	5	quartz	136	5*3	primary	
	5	quartz	278	5*1.5	primary	
	5	quartz	125	5*1.5	primary	

H.T. :Homogenized Temperature

Appendix 8 Homogenization temperature of fluid inclusions(16)

sample no.	grain no.	mineral	H. T. (°C)	size (μm)	occurrence	remarks
HR－38	1	quartz	246	8*3	primary	
	1	quartz	196	5*1.5	primary	Brownian movement at a normal temperature
	1	quartz	173	9*2.5	primary	
	2	quartz	198	5*2	primary	
	2	quartz	182	5*1.5	primary	
	2	quartz	206	6.5*2	primary	

H.T. :Homogenized Temperature

Appendix 9 Result of K-Ar method dating

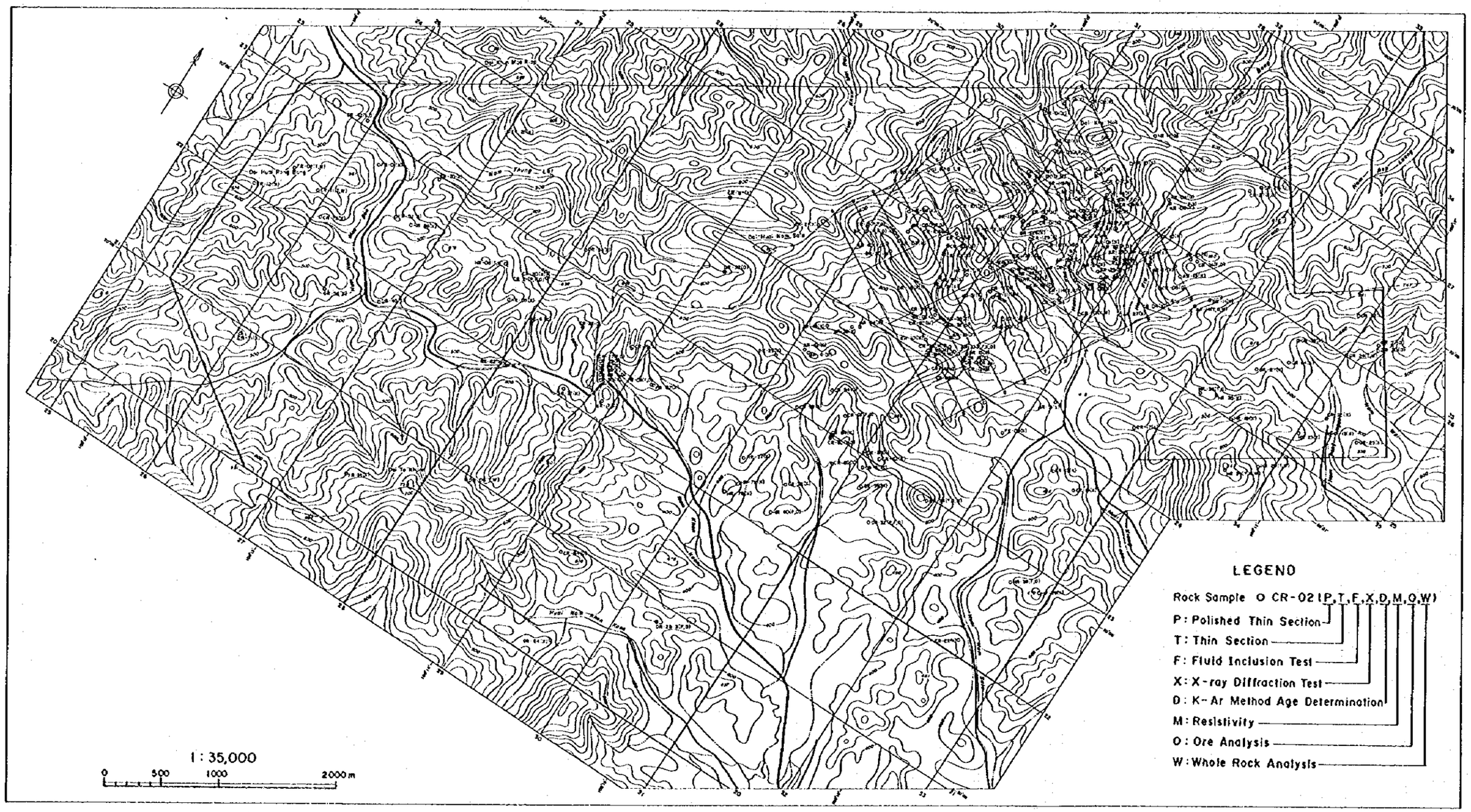
Sample No.	Rock Type	Sample Locality (latitude, longitude)	POTASSIUM (K wt%)	Rad. 40Ar (10-8cc/g)	K-Ar AGE (Ma)	AIR CONT. (%)	Average of K-Ar Age (Ma)
AR-14	Intrusive rock (cpx-basalt)	near M-0m point (N 20° 07′ 32″, E 100° 16′ 10″)	0.39 ±0.04	139±2 141±2	89.4±8.8 90.9±8.9	16.0 18.6	90.2±8.9
AR-33	Qz vein	near C-500m point (N 20° 07′ 41″, E 100° 15′ 20″)	0.07	— —	— —	— —	—
HR-36	Ryolitic welded tuff	on the ENE branch marsh of Huai Kiang (N 20° 07′ 13″, E 100° 16′ 24″)	2.55 ±0.05	679±11 678±8	67.5±1.7 67.3±1.6	9.4 8.8	67.4±1.7

* Dating was done by Mitsubishi Material Co., Ltd. Central Laboratory
* Sample AR-33 could not be measured becouse of low K content
* Decay Constant (after Steiger and Jaeger, 1977):

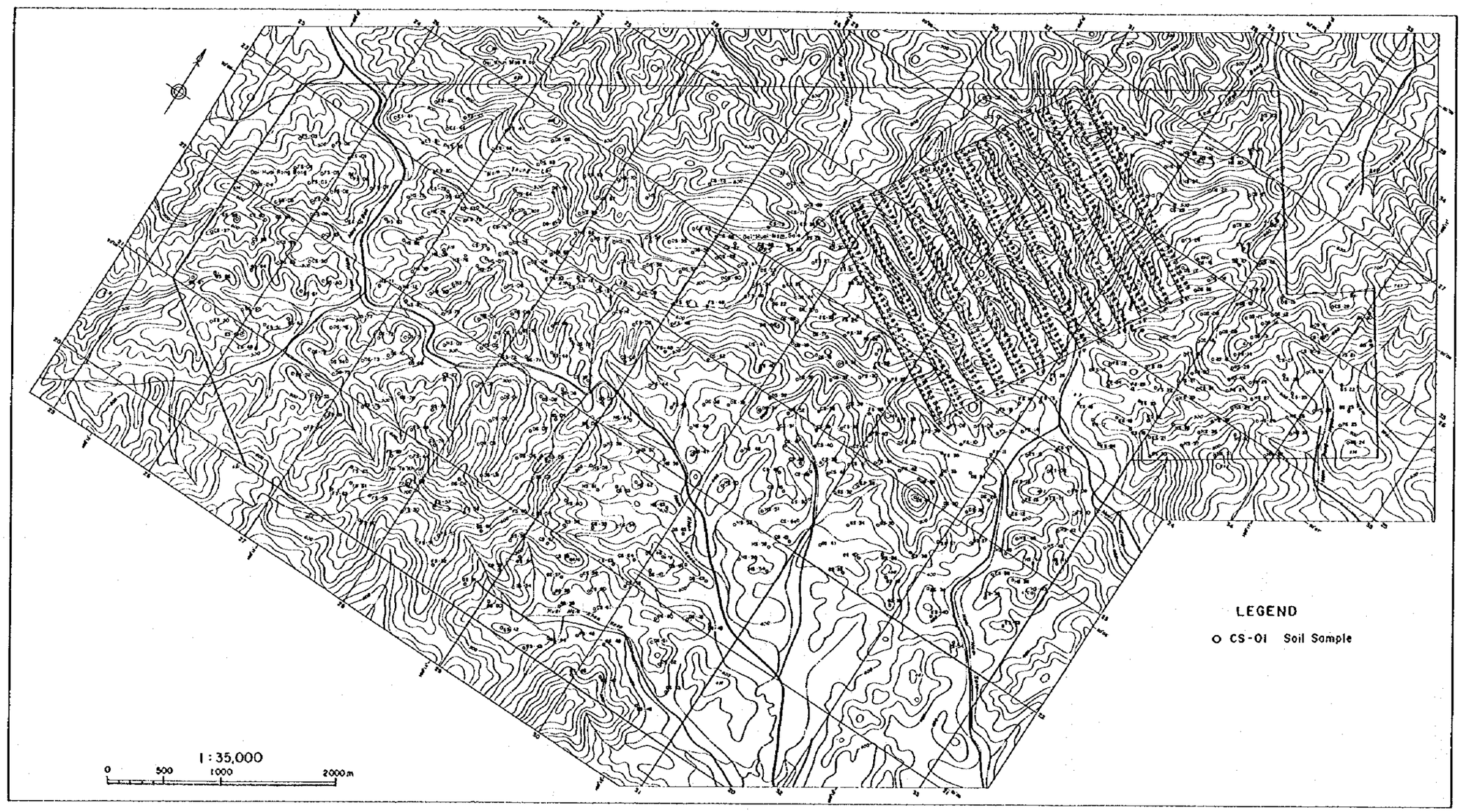
  $\lambda e = 0.581 \times 10^{-10}/yr$

  $\lambda \beta = 4.962 \times 10^{-10}/yr$

* ^{40}K content in K : $^{40}K/K = 0.01167$ atom %
* Error estimation was done after Nagao et al. (1984)



Appendix 10 Locality map of rock samples



Appendix 11 Locality map of soil samples

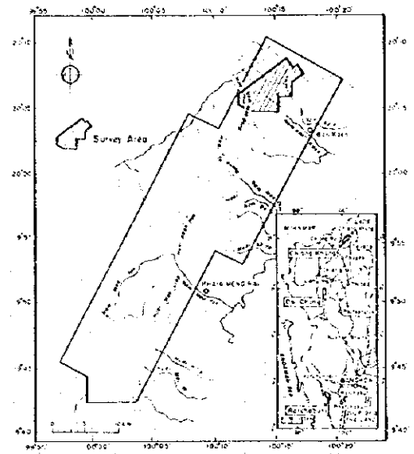
MINERAL EXPLORATION
OF
THE CHIANG KHONG, DOI CHONG, RATCHABURI AREA, THAILAND
PHASE II

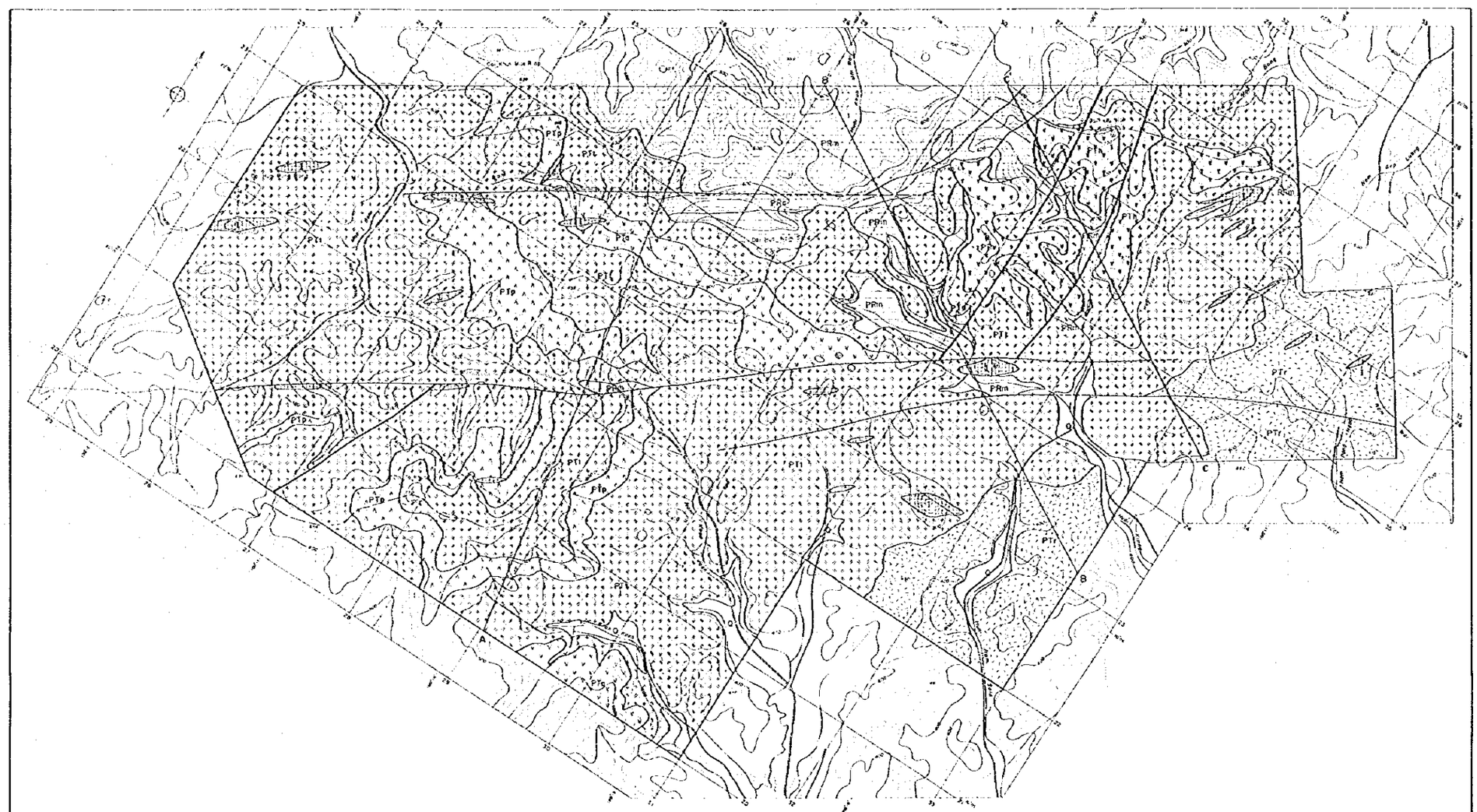
GEOLOGIC MAP AND PROFILE IN UPPER HUAI NAM SALA AREA

(Scale 1 : 20,000)

(0 500 1,000 2,000m)

LOCATION INDEX





LEGEND

Quaternary	Q	Gravel, Sand, Clay
Jurassic	J	Andesite ~ basalt
Permo – Triassic	PTh	Hornblende andesite
	PTp	Plagioclase porphyritic basalt
	PTt	Andesitic tuff ~ tuff breccia
	PTa	Andesite lava
	PTr	Rhyolitic tuff ~ welded tuff
Permian	PRm	Slate, Sandstone
	PRc	Conglomerate

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN

March 1996

Doi Khun Mae Riop

Doi Huai Rong Bong

Doi To Khuan

Doi Huai Nam Sala

Doi Kha Lo

Nam Thung Loi

Huai Khun Mai Roi

Mae Bon

Huai Nam Khan

Nam Khan Kaen

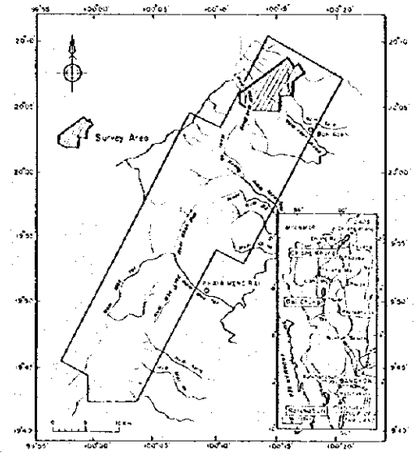
PL-2

MINERAL EXPLORATION
OF
THE CHIANG KHONG, DOI CHONG, RATCHABURI AREA, THAILAND
PHASE II

SOIL SAMPLE LOCATION MAP IN UPPER HUAI NAM SALA AREA

(Scale 1 : 10,000)

LOCATION INDEX

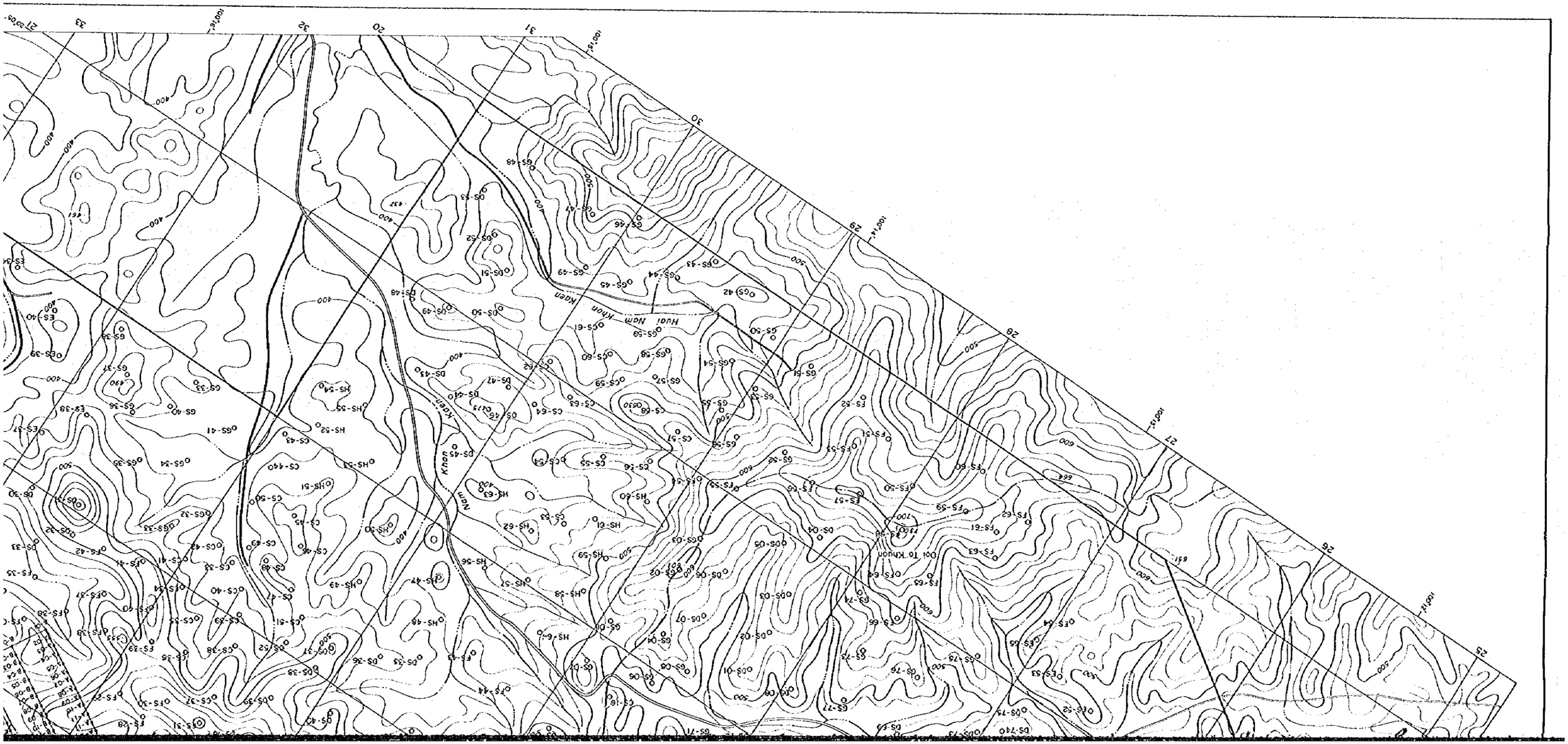


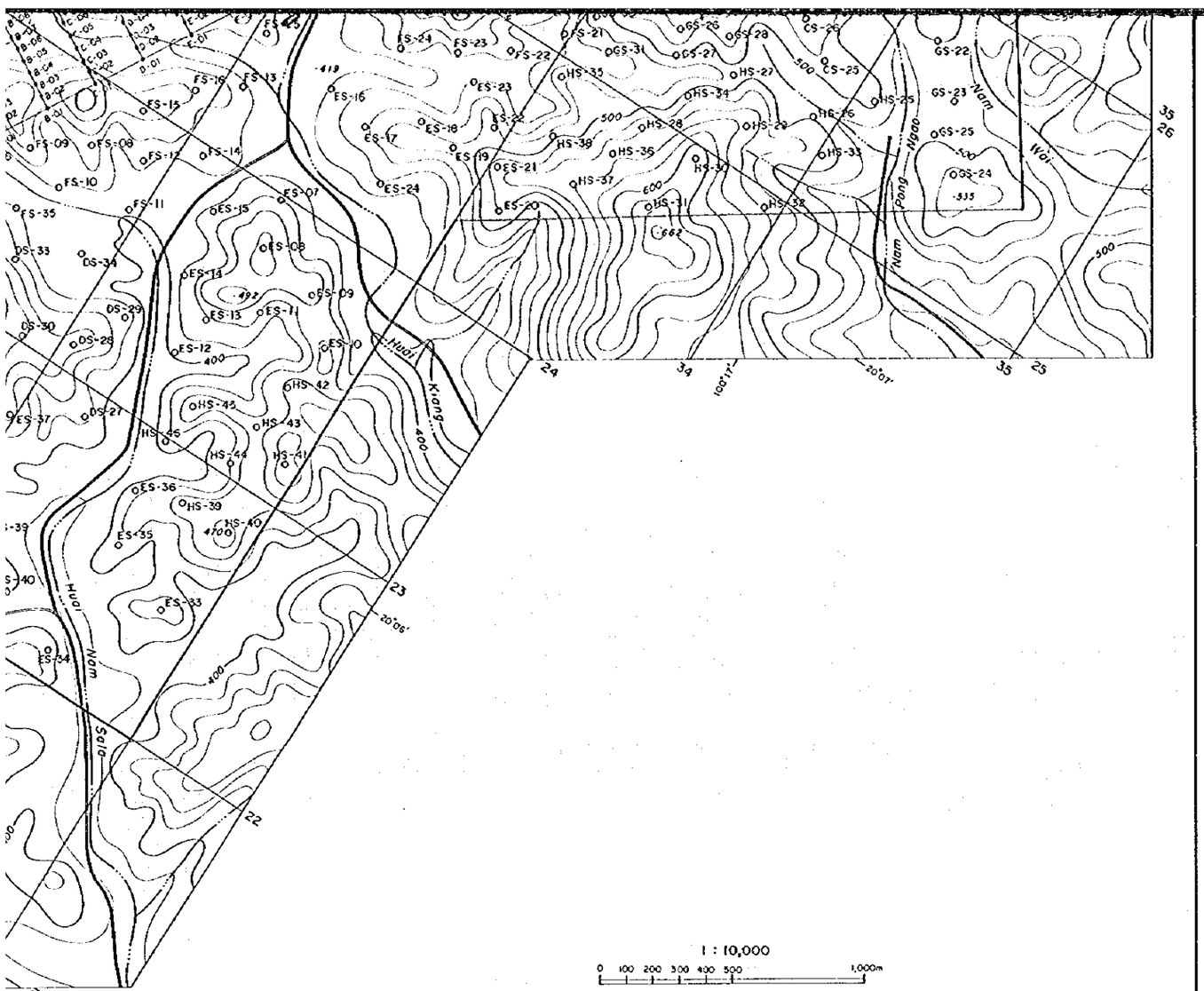
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN

March 1995

LEGEND

o CS-01 Soil Sample


27
33
32
20
31
30
29
28
26
25
Khan
Nam
Huai Nam Khan
To Khuon



○ CS-01 Soil Sample

1 : 10,000

0 100 200 300 400 500 1,000m

Doi Khun Mae Riap
Doi Huai Rong Bong
Doi Huai Nom Sala
Doi Kha La
Doi To Khuan
Nam Thung Loi
Mae Bon
Huai Nam Khan Kaen
Huai Khun Mai Rai

PL - 3

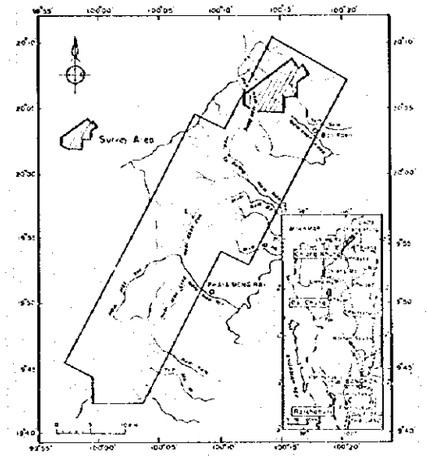
MINERAL EXPLORATION
OF
THE CHIANG KHONG, DOI CHONG, RATCHABURI AREA, THAILAND
PHASE II

ROCK SAMPLE LOCATION MAP IN UPPER HUAI NAM SALA AREA

(Scale 1 : 10,000)

(0 100 200 300 400 500 1000m)

LOCATION INDEX



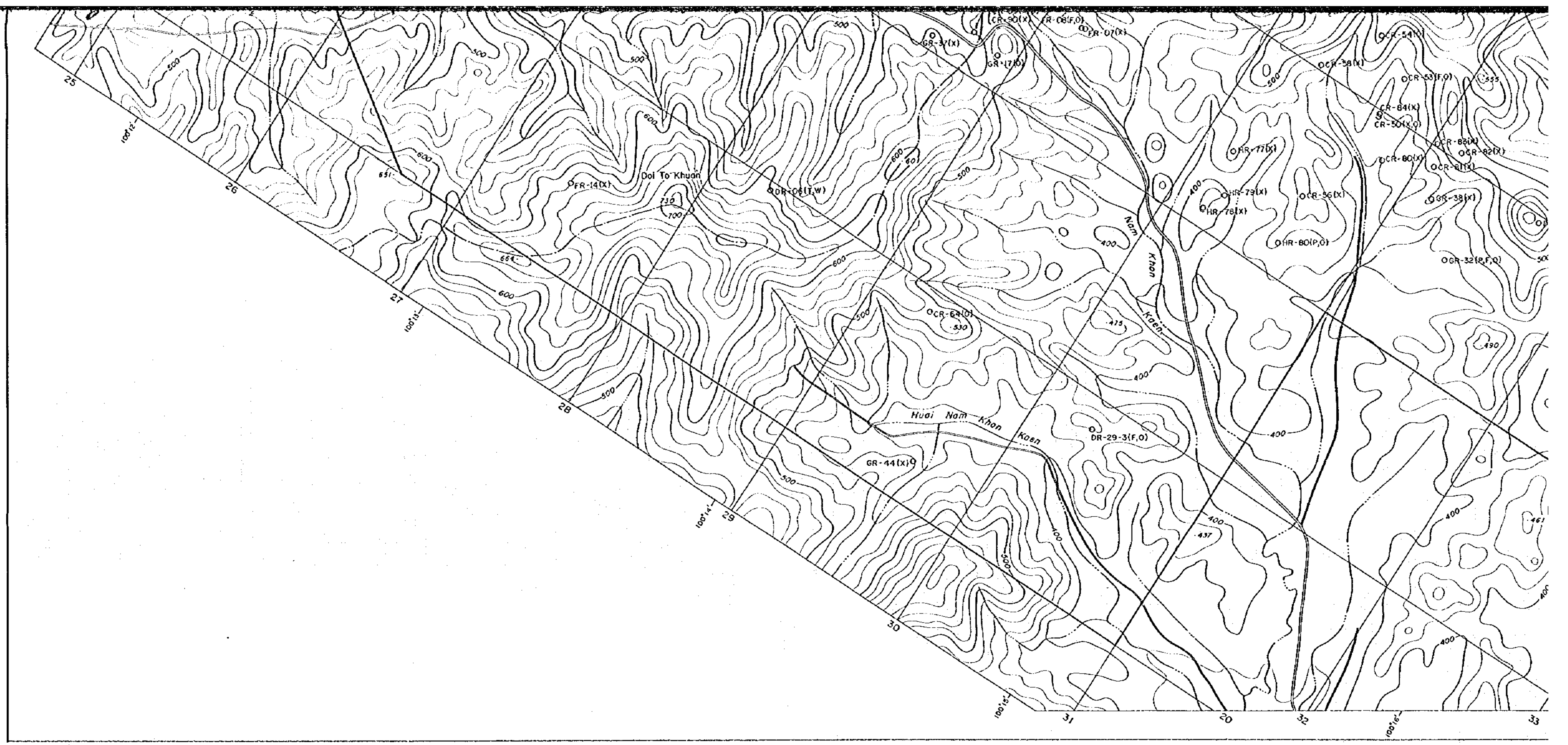
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN

March 1996

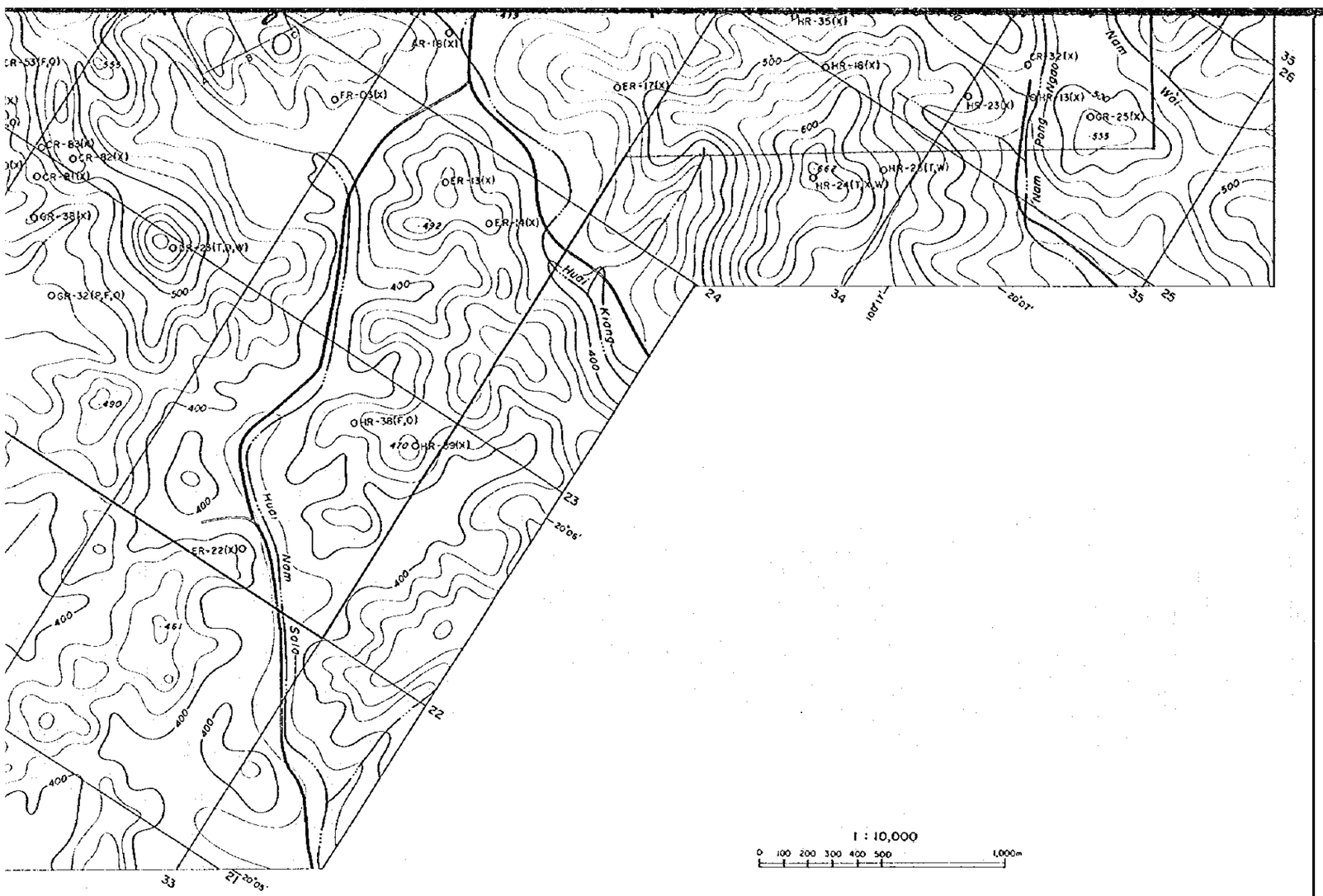
LEGEND

Rock Sample O CR-02 (P,T,F,X,D,M,O,W)

- P : Polished Thin Section
- T : Thin Section
- F : Fluid Inclusion Test
- X : X-ray Diffraction Test
- D : K-Ar Method Age Determination
- M : Resistivity
- O : Ore Analysis
- W : Whole Rock Analysis


Doi To Khuan
Huai Nam Khon Kaen
Nam Khon Kaen
FR-14(X)
DR-06(T,W)
GR-44(X)
DR-29-3(F,O)
CR-64(O)
HR-77(X)
HR-79(X)
HR-78(X)
CR-56(X)
HR-80(P,O)
GR-32(P,F,O)
GR-38(X)
CR-54(X)
CR-58(X)
CR-84(X)
CR-80(X)
GR-37(X)
25
26
27
28
29
30
31
32
33
20
100°12'
100°13'
100°14'
100°15'
100°16'

P : Polished Thin Section
T : Thin Section
F : Fluid Inclusion Test
X : X-ray Diffraction Test
D : K-Ar Method Age Determination
M : Resistivity
O : Ore Analysis
W : Whole Rock Analysis



1 : 10,000

0 100 200 300 400 500 1,000m

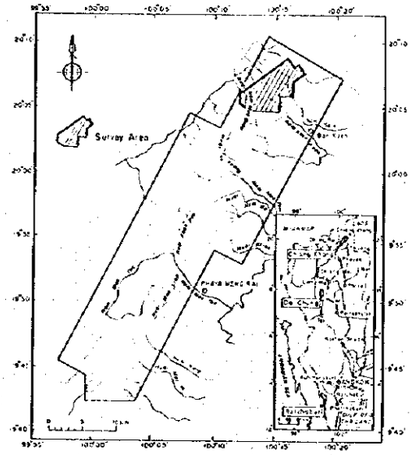
MINERAL EXPLORATION
OF
THE CHIANG KHONG, DOI CHONG, RATCHABURI AREA, THAILAND
PHASE II

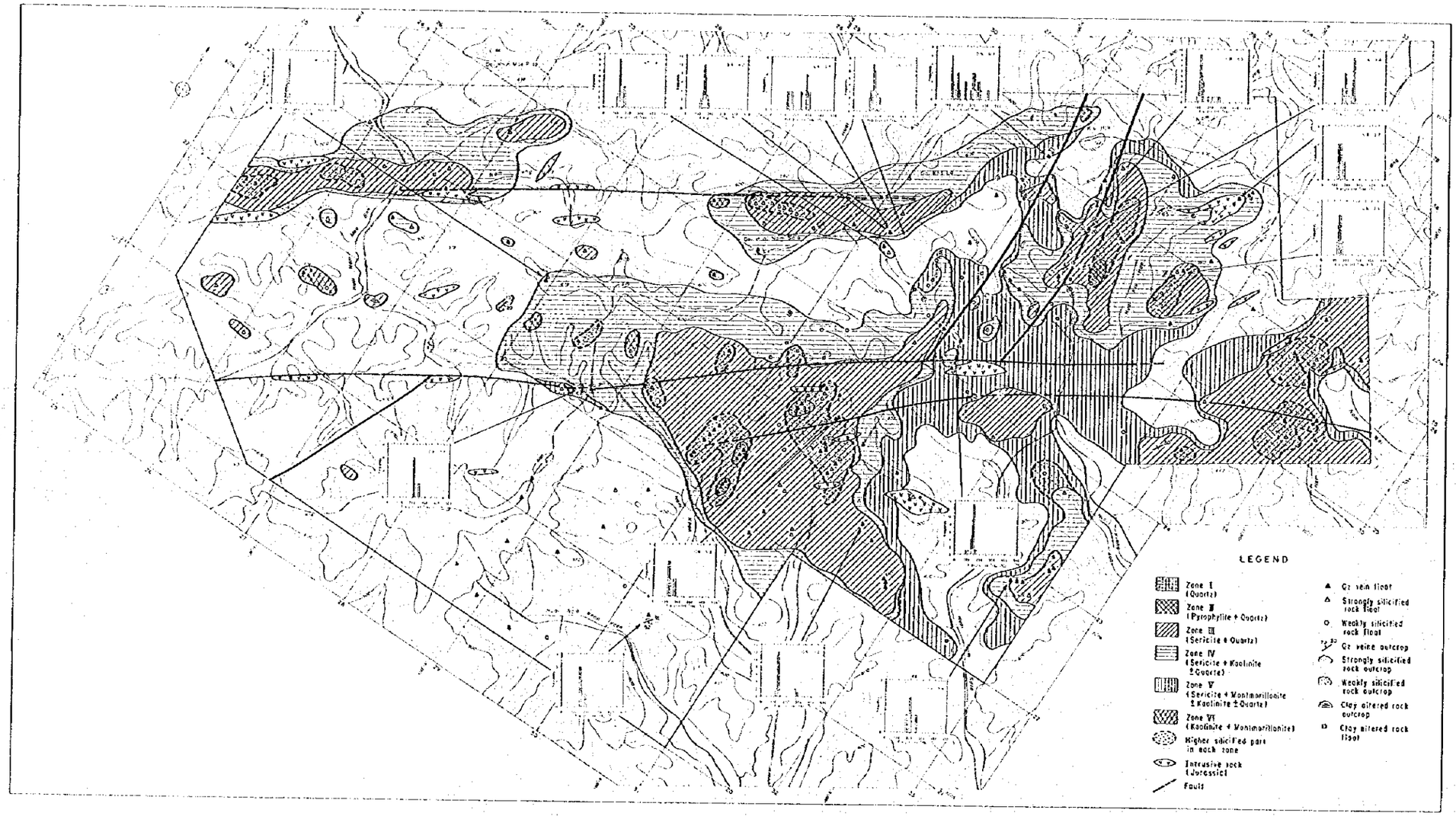
ALTERATION MAP
IN UPPER HUAI NAM SALA AREA

(Scale 1 : 20,000)

(0 500 1000 2000m)

LOCATION INDEX





JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN

March 1996

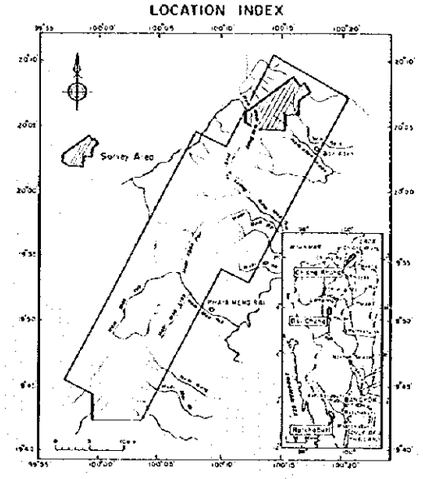
MINERAL EXPLORATION
OF
THE CHIANG KHONG, DOI CHONG, RATCHABURI AREA, THAILAND
PHASE II

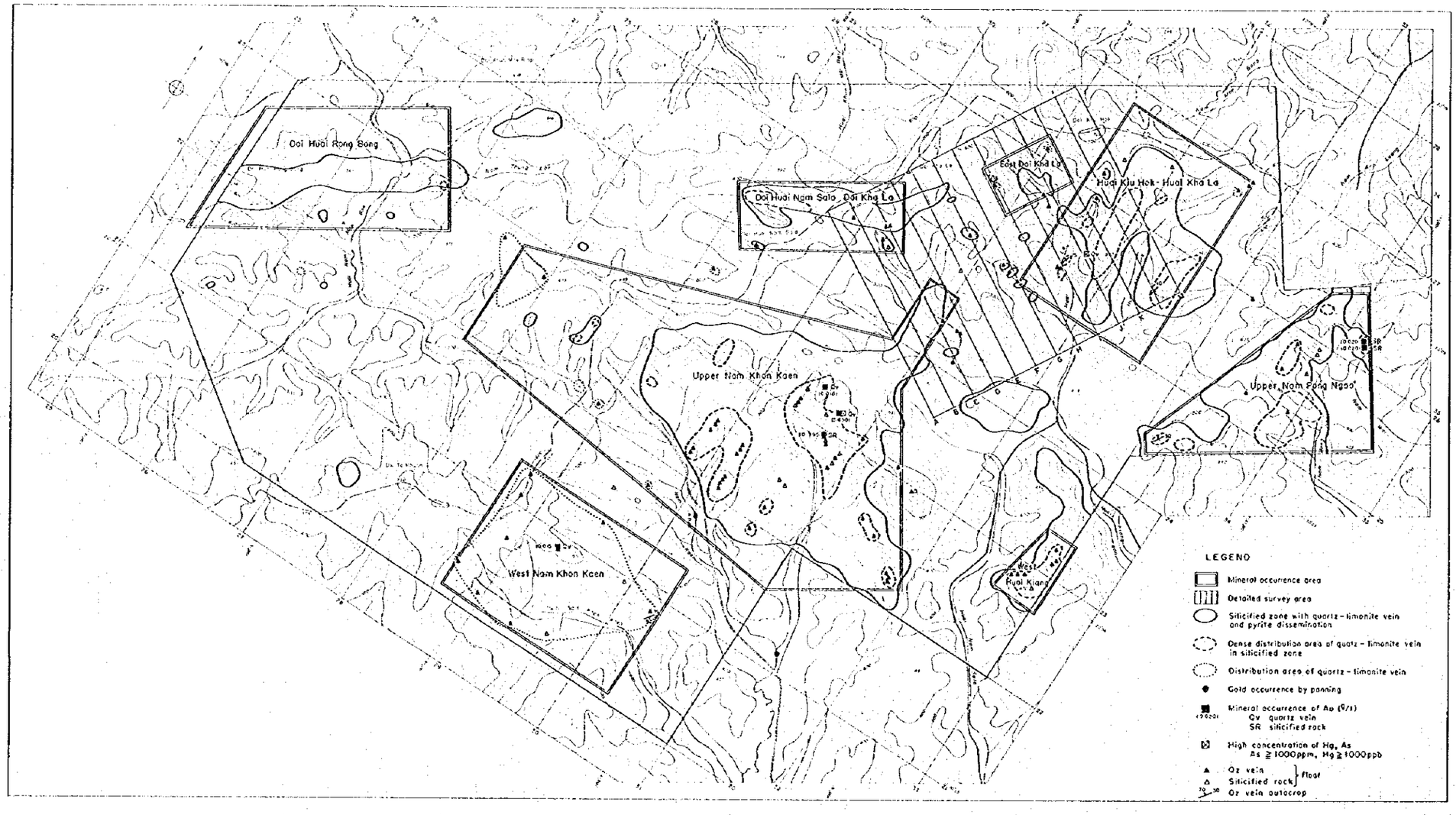
MINERAL OCCURRENCE IN UPPER HUAI NAM SALA AREA

(Scale 1 : 20,000)

(0 500 1000 2000m)

LOCATION INDEX





JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN

March 1996