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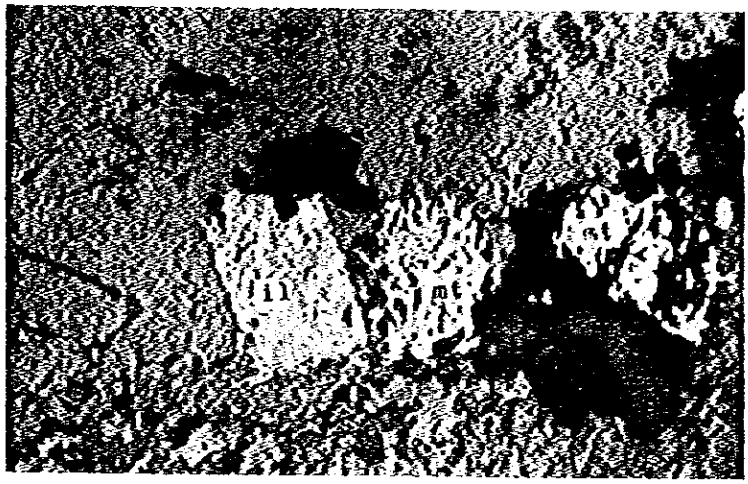
補　　遺

補　　遺

カリマンタン西部地区には，花崗岩類に伴うAu－Cu－Mo鉱化帯が知られている。また，マレー半島よりスマトラ島の東部地区に錫鉱化帯が分布するが，これらの鉱化帯の関係について知るための石原氏による不透明鉱物による花崗岩系列の分類について考察をこころみた。すなわち，石原氏によると磁鉄鉱および，チタン鉄鉱の含有により花崗岩類は磁鉄鉱系とチタン鉄鉱系の2系列に分けられるが，錫鉱床はチタン鉄鉱系花崗岩類に，ポーフィリー・カッパー系のMo－Cu鉱化帯は磁鉄鉱系花崗岩類に関係があると言われている。（石原 1977）

本調査でAu－Cu，Cu－Moの鉱化作用に関係があるBanyiトーナル岩（RB－52）および，Sirihトーナル岩（RB－24）について研磨片により検鏡の結果，不透明鉱物はPhotoに示す如く，磁鉄鉱・赤鉄鉱および，若干のチタン鉄鉱よりなり，磁鉄鉱系の花崗岩類に分類される。野外調査で使用した小型磁石でも両トーナル岩の他G. Raya花崗閃緑岩でも磁性が感じられ本調査地域の花崗岩類は磁鉄鉱系と考えられる。マレー半島～スマトラ島にかけての，錫－W鉱化帯ではチタン鉄鉱系の花崗岩類よりなることと比較してカリマンタン西部地区では違った花崗岩類が分布することにより，この地域ではマレー半島～スマトラ東部の錫鉱化帯と違ったCu－Mo鉱化帯（ポーフィリー・カッパー型？）が分布するものと考えられる。

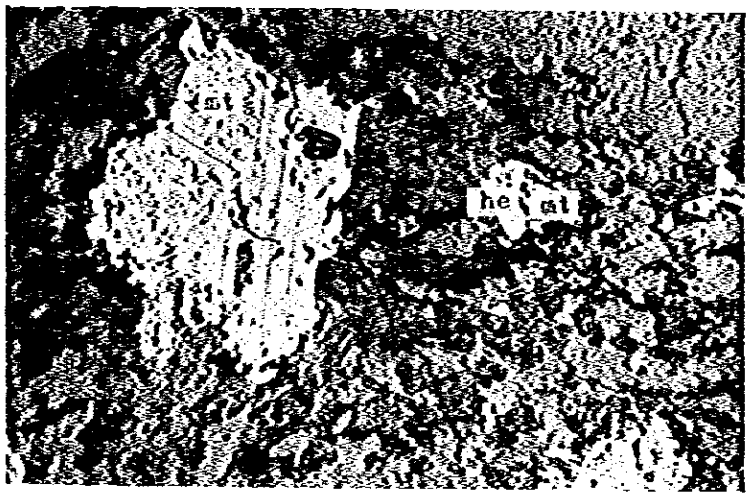
Microphotographs of Polished Sample
(Opaque Minerals in Granitoid Rock)



Sample No.: RD-52
Locality : S. Bani
Name
of Rock : Banyl Tonalite

il: ilmenite
mt: magnetite

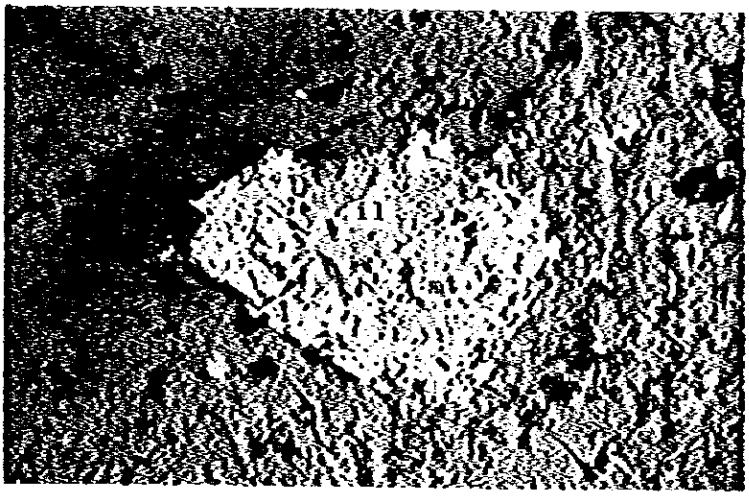
0 1 2 3mm



Sample No.: RD-52
Locality : S. Bani
Name
of Rock : Banyl Tonalite

il: ilmenite
mt: magnetite
he: hematite

0 2 4 6 8mm

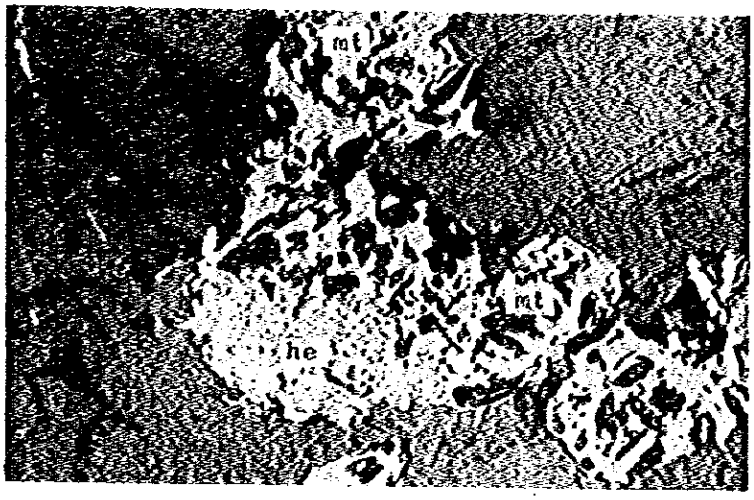


Sample No.: RD-52
Locality : S. Bani
Name
of Rock : Banyl Tonalite

mt: magnetite
he: hematite

0 1 2 3mm

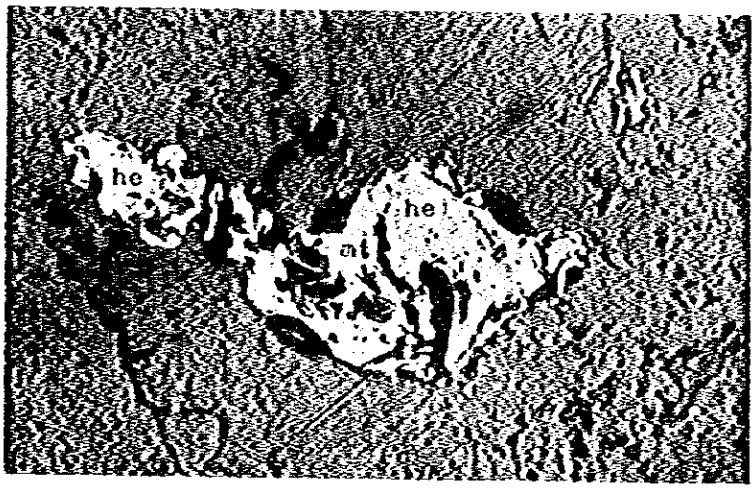
Microphotographs of Polished Samples
(Opaque Minerals in Granitoid Rock)



Sample No.: BB-24
Locality : S. Bamua
Name
of Rock : Sirih Tonalite

mt: magnetite
he: hematite

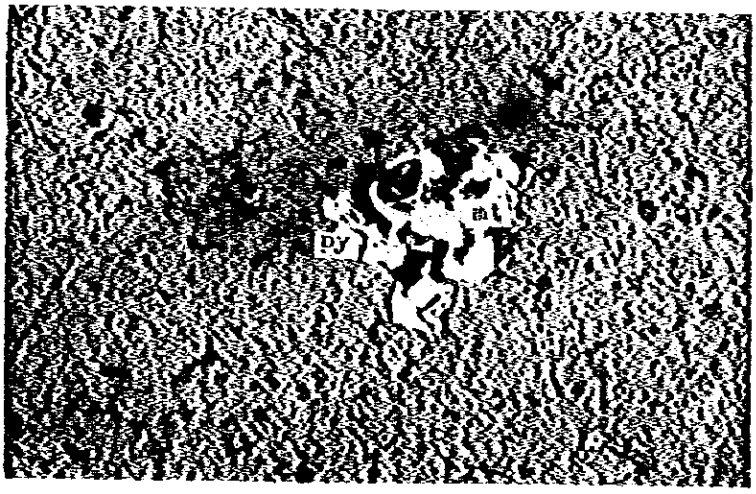
0 1 2 3 mm



Sample No.: RB-24
Locality : S. Bamua
Name
of Rock : Sirih Tonalite

mt: magnetite
he: hematite

0 1 2 3 mm



Sample No.: RB-24
Locality : S. Bamua
Name
of Rock : Sirih Tonalite

mt: magnetite
py: pyrite

0 1 2 3 mm

APPENDICES

Appendix 1 Precipitation in Bengkayang

1975 Bengkayang

Month / Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3	59			5	40			23		7	
2	15	4	21		34				37		3	
3	5	34										
4	10	23				2	1		9		3	
5	10		6	31		3		28	7			
6		17	6	54	1		5	24	8	24		13
7	16		13	1	3		12	5		14	15	11
8	30	5									16	
9	15	45	26	11					42	3	42	
10		1	11	42	11				36	17	9	1
11		8		34	7				9	11	29	21
12	7			14			5		3	19	2	21
13	7			27	27		4		19	40		
14		3	15							8		
15			6	4	17		3	46			17	5
16		9	9	23	1	11				2	25	21
17				40		25	17	7			34	12
18			1	4			5			19		1
19		1	17	4		12	15	13	120	10		1
20		8					5	10		12	3	
21		9		8							13	22
22	5	62	21				4	2			25	7
23	7	131			13		9	43	14	6	3	137
24		15		3	10		4	1	4		2	
25	17			14	18		31		5	34	11	3
26	23	24		9	3		35			14		
27	21	12		1	21	3	22	19	20	4	29	
28		1	10				1		70	14	13	26
29	26			13			6			4	15	
30	3			1		21		28	3	8		
31								3		13		3
Total	220	471	162	338	171	117	184	229	429	276	316	305

1976

Bengkayang

Month / Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1			7		16				20	16	25	14
2				32	11					9	41	
3			3	2			27	6		36	2	22
4				6								28
5				14		5	3			5	38	
6	7				10		7		30	12		
7	9					3	8		3	31		
8	4		9							35		
9	32		30	6	3	1		3	33	42	23	
10	92		5	19			23		10	1	4	
11	5				4	12					7	62
12	20							2		20		17
13	40	46		70	19	2		12		11	9	
14	12	51	40	33		2	25	3			2	76
15			36	1		1					5	29
16										23	14	2
17		4								3	13	10
18			2	71						9	55	17
19				2						28	9	
20		16	11							15	3	5
21		5										
22		32		18		1			6	5	1	
23		3		5						16	18	7
24			82	2				3		6	2	21
25	12					10		2		9	21	12
26	19			21		6	5	16	15	7	12	
27	1		1	13			26	4		17	33	12
28		5		9				11	32		25	
29			8	37	10			3			13	11
30			2	13			5		5	37		
31					3		26			8		10
Total	253	162	236	374	76	43	155	65	154	401	375	355

1977

Bengkayang

Month / Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	11	10		30		34				5	38	8
2	14	11		4	90	9				89	25	22
3	6			14	17		38			90	7	28
4	21	25		55		4				15	37	13
5	24	2		51	9	60	30	9		42		17
6	17	42		9	17		30			25	4	2
7		8					9	8			27	35
8		60			40	7	33			9	45	
9	7	12		61	5			19		3		
10	5	9			34					15		
11		58			41	16		2		114		13
12		1	116		2		18	34	16	41	18	5
13			1		25		14	30	5		1	20
14		3			4			10		15	19	8
15		11			1	3					68	
16		9		55	4					20		16
17	3		15			4					4	5
18	8	17			25				11	20	12	
19		18		6							3	
20	13	31			9			19		1	30	21
21	9	15			1	1	6			13		
22	9	32		21				45		13	5	
23	1		1		4		15			36		5
24		42	1				2	28		18	13	
25		9		18	32		3		3	70	19	
26		5		20	2					4	40	10
27			2				2	25	7	25	17	7
28			2	21				22			17	30
29			8	104					21	31	42	6
30	3		34			10			72	1	8	
31	15									2		
Total	166	430	180	469	362	148	200	251	135	717	499	271

1978 Bengkayang

Month / Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	44							31	4		56	6
2	3						20		12	16	47	
3			5	16	6		7	7		4	7	
4			6	35		4						10
5			5			21		15	1		23	2
6	14		17						48		9	
7	39	9			77	1			13			22
8	23	4			11	8	5		1			11
9		5	44		6		69		6	11		6
10	2		6	139	17	1	3		4		8	
11	18	20		4					23			
12	6	8		3	7	23	28				5	
13	9	2	51	14	59	22			11		10	
14			8		2					10	18	14
15			27	5			21	74			9	6
16	16	1	45							9	1	2
17	5		8	9	5		6	48	13		5	22
18			9	16					1	6	5	
19	13	7		20			10			29	50	16
20	10		47	4					28	20	11	17
21		1	42		1					3		
22	7		9								3	6
23	57								70	54	8	
24	2		6						4	65	10	
25		6	23				2			7	3	
26		9	3	7		28				21		37
27	3			15						18	7	26
28		17	10		5					11	18	3
29			3		22					5		5
30			54							16		
31	1				1					41		
Total	272	89	428	287	219	108	171	175	239	346	313	211

1979 Bengkayang

Month / Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	12			15	30							
2	3			6	9							
3	2											
4	24	13		6		39						
5	9	50	22	25								
6	4		13		45	37						
7	9			3		30						
8	2					5						
9		7		1								
10		7		6	5	8						
11				7	13							
12		28		3								
13				140		5						
14		41										
15		9				5						
16						51						
17		6										
18		48				24						
19		30				24						
20				2								
21	38			4								
22	15	13	49	40		14						
23			6	40								
24			3	67	3							
25	6	2	3	14								
26				13		17						
27	5		12	26								
28	6		28		33							
29	9		3		2							
30	9			22	25							
31	17											
Total	170	254	139	440	165	259						

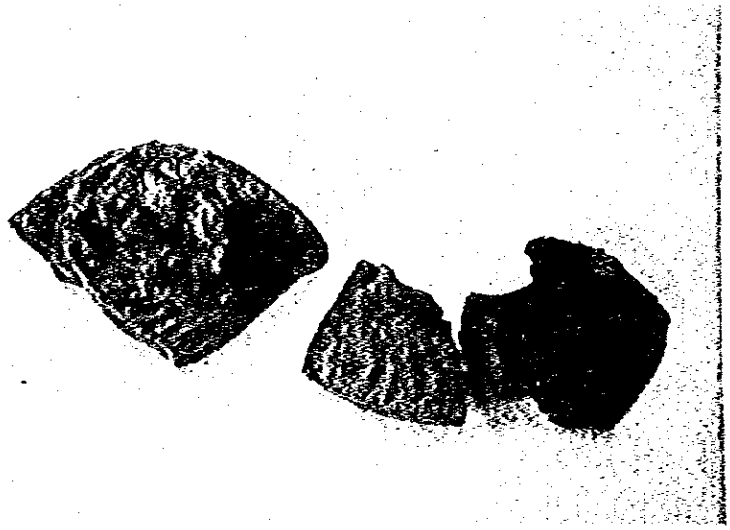
Appendix 2 List of Rock, Ore and Fossil Tested

Sample No.	Thin Section	Polished Section	Chemical Analysis	X-Ray Analysis	K-Ar Dating	Rock Chemical Analysis	Fossile Identification
RA - 4	o						
RA - 9	o						
RA - 21	o						
RA - 33	o						
RA - 42	o						
RA - 49	o						
RA - 63	o						
RA - 67	o						
RB - 1	o						
RB - 4	o						
RB - 7	o						
RB - 8	o						
RB - 10	o						
RB - 15	o						
RB - 16	o						
RB - 17	o						
RB - 18	o						
RB - 19	o						
RB - 23	o						
RB - 24	o				o	o	
RB - 26	o						
RB - 27			o				
RB - 28			o				
RB - 33	o	o					
RB - 39			o	o			
RB - 42	o						
RB - 44			o				
RB - 48		o					
RB - 52	o						
RB - 54			o				
RB - 60	o						
RB - 61	o						

Sample No.	Thin Section	Polished Section	Chemical Analysis	X-Ray Analysis	K-Ar Dating	Rock Chemical Analysis	Fossile Identification
RB - 62	o						
RB - 68			o				
RB - 70	o						
RB - 72	o					o	
RC - 27	o						
RD - 7							o
RD - 10	o						o
RD - 11	o						
RD - 12	o						
RD - 14	o						
RD - 18	o						
RD - 23	o						
RD - 28	o					o	
RD - 29	o						
RD - 35	o						
RD - 37	o						
RD - 48	o						
RD - 52	o				o	o	
RD - 53			o				
RD - 54			o				
RD - 55			o				
RD - 56			o				
RD - 57			o				
RD - 58			o				
RD - 59			o				
RE - 2	o						
RE - 30	o					o	
RE - 40	o						
RE - 50	o				o	o	
RE - 71		o					
RE - 80	o						
RE -100	o						

Sample No.	Thin Section	Polished Section	Chemical Analysis	X-Ray Analysis	K-Ar Dating	Rock Chemical Analysis	Fossile Identi-fication
RF - 8	o						
RF - 10	o						
RF - 11	o						
RF - 15	o						
RF - 20	o					o	
RF - 25	o						
RF - 30	o						
RF - 32	o					o	
RF - 35	o						
RF - 37	o						
RF - 43	o						
RF - 45	o						
RF - 48	o						
RF - 51	o						
RF - 54	o						
RF - 55	o						
RF - 58	o						
RF - 64	o						
Rk - 29		o					
Rl - 2							o
Rl - 54							o
Rl - 61	o		o				
Rl - 62		o					
Rm - 1	o						
Rm - 12	o						
Rm - 19	o						
Rm - 23	o						
Rm - 25	o	o					
Rm - 63	o						
Rn - 4	o	o					
Rn - 23	o						
Rn - 32	o					o	

Sample No.	Thin Section	Polished Section	Chemical Analysis	X-Ray Analysis	K-Ar Dating	Rock Chemical Analysis	Possile Identi-fication
Rn - 38	o						
Rn - 41	o						
Rn - 58	o						
Rn - 61	o						
Rn - 66	o						
Ro - 5		o					
Ro - 21	o						
Ro - 43	o						
Rp - 19	o				o	o	
Rp - 25	o						
Rp - 32	o						
Rp - 41	o						
Rp - 42	o						
Rp - 48	o						
Rp - 53	o						
Rp - 59	o						
Rp - 69	o						
Rg - 59	o					o	
Batu Aji		o	o				
Senture Lower			o				
Senture Upper			o				
Serantac (A)		o					
Serantac (B)		o					
Total	93	11	17	1	4	11	4



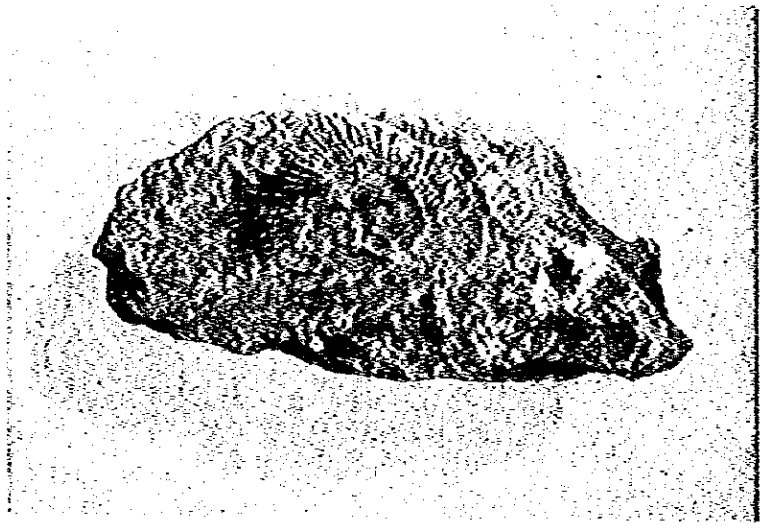
0 1 2 3cm

Sample No.: R1-54

Location : Bengkayang

Harpoceras (Harpoceras) sp

Jurassic Lias. Toarcian



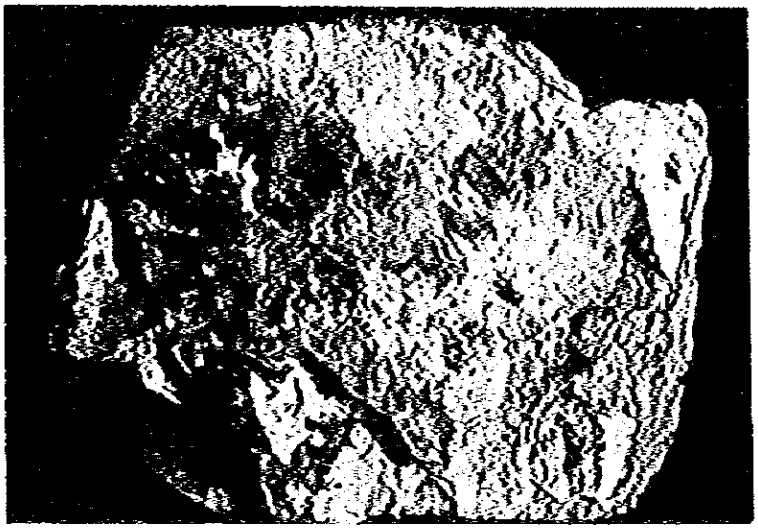
0 1 2 3cm

Sample No.: R1-2

Location : S. Jebane

Dactylioceras (Orthodactylites) sp

Jurassic Lias. Toarcian



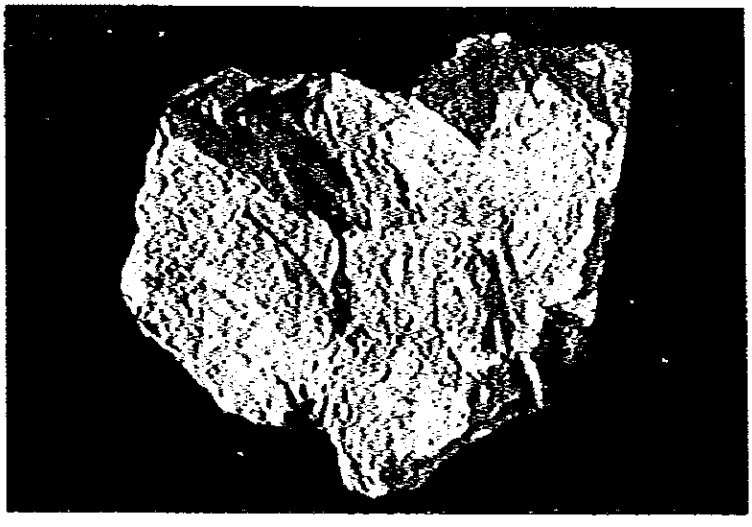
0 1 2 3 4 5cm

Sample No : RD-7 (A)

Location : S. Jebane

Dactylioceras (Orthodactylites) sp

Jurassic Lias. Toarcian



0 1 2 3cm

Sample No : RD-7 (B)

Location : S. Jebane

Dactylioceras (Orthodactylites) sp

Jurassic Lias. Toarcian

Appendix 4(1) Microscopic Observation of Thin Section

Sedimentary rock

Sample No	Rock name	Texture	grain / Frogment										matrix										Secondary Mineral										Remarks
			Q	K-f	Pl	Bt	Hb	Au	Hy	Ol	Op	Lith	Q	Si	K-f	Pl	Bt	Hb	cpx	opx	Ol	Op	Q	Si	Cc	Ser	Chl	Kao	Bt	Act	Epi	Op	
Bengkayang Group																																	
Banan Formation																																	
RB - 1	lfss	ss	o		◎		o					dac and	o			◎		●												●			
" - 4	"	"	o		o								o			o															o		
" - 7	"	"	o		o								o					o															
" - 8	fss	"	◎		o		o				●		◎				●	●											●				Hf
" -15	dac lfss	"	◎		o		o					dac																					
" -16	llfss	"	◎		o						●		o													●	●				●		
" -19	lfss	"	◎		o							dac	o																		o		
" -70	dac lf	"	◎		o						●		o			o		o													●		
Kalung Formation																																	
RB -62	blsh	ss	◎		◎																						●						
Riompelayo Formation																																	
RB - 61	ss	ss	o		◎							and dac	o													●	●						
RA - 67	"	"	◎		o							and dac	o												●	o							

Abbreviation

Rock

lfss	:	lufaceous sandstone
fss	:	fine sandstone
llfss	:	fine lufaceous sandstone
blsh	:	balck shale
and	:	andesite
dac	:	dacite

Texture

s.s	:	sadstone

Minerol

Q	:	quartz
K-f	:	koli feldspar
Bl	:	plagioclase
Bt	:	biotite
Hb	:	hornblende
Au	:	augite
Hy	:	hypersthene
Ol	:	olivine
Op	:	opaque minerol
Lith	:	lithic fragment

Si	:	silica
Cpx	:	clinopyroxene
Opx	:	orhto pyroxene
Cc	:	calcite
Ser	:	sericite
Chl	:	chlorite
Kao	:	kooline
Act	:	actinolite
Epi	:	epidote
Hf	:	hornfels

Appendix 4(2) Microscopic Observation of Thin Section

Hypobyssal, Volcanic and Pyroclastic rock

Sample No	Rock name	Texture	Phenocryst / Fragment										Groundmass / matrix									Secondary Mineral											Remarks
			Q	K-f	P-l	B-t	Hb	Au	Hy	Ol	Op	Lith	Q	Si	K-f	Pl	Bt	Hb	Cpx	Opx	Ol	Op	Gl	Q	Si	Cc	Ser	Mon	Sap	Chl	Xao	Bt	Act	Ep	Op	Zeo	Ab	Py	
hypobyssal rock																																						
RB - 10	qlz por	porp	◎		◎								o				◎												●									
" 23	altered dac	"	o		◎		o						o											o			o										●	Hydth
RQ 59	qlz-dio por	"																																				
RC - 27	dol	dol			o			o		?			●			o			o	o																		
RP - 25		"			◎			o																														
Serantak Dacite																																						
RA - 49		porp	◎		◎	?					●		o			o	●										●											
" - 17		"	o		◎								o			o	o																●					
RB - 72		"	◎		◎		●				●		o			o		●																●					
J.rak Formation		"																																				
RD - 10	tf s s	pyro	o								●	and	o													o				●								
" - 11	and	trachy			◎																					o				o								mat chl
" - 12	and tf lap	pyro			◎						●	and	o													o				o								
" - 14	and	"			◎								o			o										o				o								
" - 23	and tf br	"										and	●			●														●			●					
RE - 40	and tf lith	"	●		◎							-	o			o																	●					Lith: mat = 1:3
RF - 15	" " "	"	o		◎							-	o			o														●		●	●					Cont meta
Belong Formation																																						
RF - 8	dac tf crys	pyro	o		◎							dac and	o			●																						
" 37	dac tf lap	"	o		o							"	o			o														●			●					
" - 43	rhy	"	o		◎								◎														o											Cont meta
" - 48	and tf lap	"	o		◎							and																		●			●					Lith: mat = 1:3
" - 51	dac tf	"	o										o											o		o							●					Lith: mat = 2:1
" - 54	" "	"	o		◎							and													o													Lith: mat = 1:10
" - 58	dac tf lith	"	o		◎								o														o			o			●					Cor met
" - 64	dac	fel crypto			o								o			o											o			●			●					Ser met
RO - 21	dac tf lap	pyro	o		◎		●					dac and	o				●	●																					epi met
RP - 42	dac tf	"	o	●	◎						●	dac and																		●			●					
" - 48	" "	"	o		◎							"	●					●									●			●			●					
" - 53	dac tf s s	"	o		o							dac	o			o														●			●					Lith: mat = 5:1
" - 59	alt rock	"																						◎										o					olunite
Serantak Formation																																						
RA - 4	dac tf s s	pyro	◎		o							dac	●			o														●								
" - 9	" " "	"	o		◎							"	●			●														●			●					
" - 21	" " "	"	o		◎							"	●																	●								frag: mat = 4:6
" - 33	dac tf by	"										dac and	o			●														●								
" - 42	dac tf	"	◎		o							dac	◎			●											●			●			●					
" - 63	" "	"	◎		◎								◎			●											●			●			●					
RB - 52	dac tf lap	"	◎		o							dac	◎														●			●			●					

Abbreviation

Rock

tf	: tuff
tf	: tuff breccia
tf lap	: tapilli tf
tf lith	: lithic tuff
dac	: dacitic
and	: and
dol	: dolerite

Texture

dol	: doleritic
porp	: porphyritic
hyalopi	: hyalopiritic
pyro	: pyroclastic
crypto	: cryptocrystalline
fel	: felsic

Mineral

Q	: quartz
K-f	: kali-feldspar
Bt	: biotite
Hb	: hornblende
Au	: augite
Hy	: hypersthene
Ol	: olivine
Op	: opaque mineral
Si	: silica
Cpx	: clino-pyroxene
Opy	: ortho-pyroxene
Cc	: calcite
Ser	: sericite
Chl	: chlorite
Act	: actinolite
Epi	: epidote
Lith	: lithic fragment

Ser met : sericitization
epi met : contact metamorphism
Lith met : lithic fragment : matrix
hydth : hydrothemal alteration
Cor met carbonatization

Appendix 4(3) Microscopic Observation of Thin Section

Intrusion rock

Sample No.	Rock name	Texture	phenocryst Q	K-f	Pl	Bt	Hb	Au	Hy	Ol	Op	Groundmass Q	Si	K-f	Pl	Bt	Hb	cpx	opx	Ol	Op	Secondary Mineral Q	Si	Cc	Ser	Mus	Scp	Chl	Kzo	Bt	Act	Epi	Op	Zeo	Py	tour	Remarks
G. Raya Granodiorite																																					
RD-37	hb bt gradio	hol-crys	⊕	•	⊕	o	•				•																	•									
RE-2	〃	〃	⊕	•	⊕	o	•				•																	•				•					
RF-10	hb bioqtz-dio	(porph)	o	o	o	o	•				•																	•									
〃 -11	bt gradio	hol-crys	⊕	⊕	⊕	⊕	⊕				•																	•									
〃 -20	hb bt gradio	〃	⊕	o	⊕	o	o				•																	•				•					
〃 -25	〃	〃	⊕	•	⊕	•	•				•																	•				•					
〃 -45	bt hb ton	〃	⊕	•	⊕	•	o				•																										
〃 -55	ton porph	porph	⊕	•	⊕							o		o	o													o				o			o	o	mol+chl ep
Rm-12	altered ton	hol-crys	⊕	?	⊕																			o	o			o				o			o	o	hydth (tour-vein)
〃 -23	hb bt gradio	porph	⊕	o	⊕	o	•				•																	•				•					
〃 -63	〃	hol crys	⊕	o	⊕	o	•				•																	•				•					
Rn-23	hb qtz dio	〃	⊕	•	⊕	•	⊕				•																	•				•					
〃 -41	hb bt gradio	〃	⊕	o	⊕	•	•				•															•		•				•					
〃 -61	〃	〃	⊕	o	⊕	•	•				•																	•				•					
Ro-43	〃	(porph)	⊕	•	⊕	o	o				•														•	•		•				•					
Rp-19	〃	hol-crys	⊕	•	⊕	•	•				•																	•				•					
〃 -32	〃	〃	o	o	⊕	o	o				•																	•				•					
〃 -41	〃	〃	⊕	o	⊕	o	o				•																	•				•					
〃 -69	〃	porph	⊕	o	⊕	o	•				•																	•				•					
Tiong quartz diorite																																					
RE-50	Au bt hb qtz dio	hol-crys	o	•	⊕	o	o	•	•		•																	•				•					
Rm-19	hb bt qtz dio porph	porph	o		⊕							o		•	o																						hydth (tour-vein)
〃 -25	〃	〃	o		⊕	•	•				•	o			o	o	o			•								•				•			•	•	
Granite 1																																					
RF-30	bt gra	hol-crys	⊕	o	⊕	o					•															•						•					
〃 -32	〃	porph	⊕	o	⊕	o					•																	•				•					
Rn-38	bt grodio	hol-crys	⊕	o	⊕	•					•																										
〃 -58	alt-gra	(altered)																				⊕		o				o			•			•		•	hyd+h(?)
Granite 2																																					
RE-30	bt hb grodio	porph	o		⊕	o	o					o		o	o	o	o																				
〃 -80	hb bt gra dio	hol-crys	⊕	o	⊕	•	•				•																										
Rn-32	bt gra dio	〃	⊕	o	⊕	o					•																	•				•					
Pandan quartz gabbro																																					
RD-18	qt au hb gab	(porph)	•		⊕		o	o			•																										
RD-28	〃	eq-gra	•		⊕	o	o	o	•		•																										
〃 -29	〃	〃	•		⊕		o	o																		•		o				•					
〃 -48	〃	(porph)	•		⊕		o	o	•		•																	•				•					
Bongi tondlite																																					
RD-35	hb bt ton	hol crys	o	•	⊕	•	•				•																	•									
〃 -52	〃	〃	o	•	⊕	•	•				•																										
RE-100	hb ton	porph	o	•	⊕		o				•	o		•	o	•												•									
RF-35	gra dio	〃			⊕	•	•					o			o													•				•				mol+chl ep	
Rt-61	bt hb ton	hol crys	⊕	•	⊕	•	•				•																										
Rm-1	〃	〃	o	•	⊕	•	o				•																										
Rn-66	〃	〃	o	•	⊕	•	o				•															•		•									
Sirih tondlite																																					
RB-24	hb bio ton	hol crys	o	o	⊕	•	•				•																	•				•					
〃 -33	〃	〃	o	•	⊕	o	•				•															•		•				•					

Abbreviation

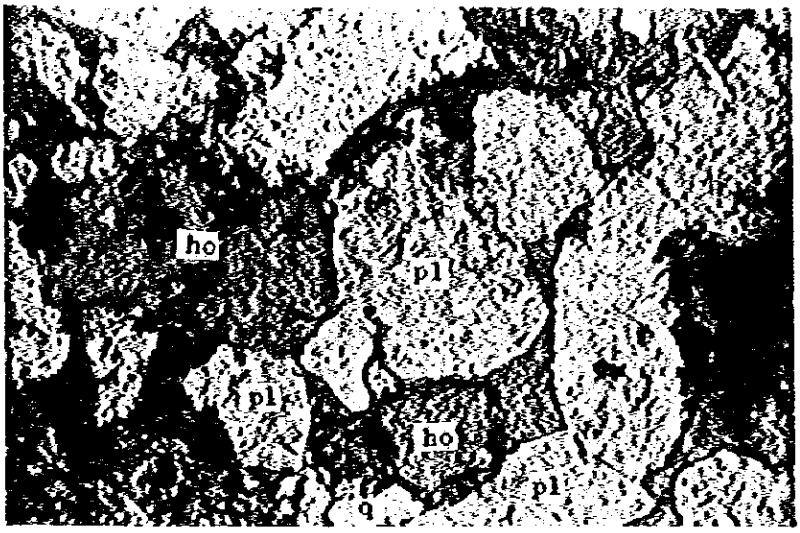
Rock
- qtz porph : quartz porphyry
- ton : tonalite
- grodio : granodiorite
- qtz-dio : quartz diorite
- gra : granite
- qtz-gab : quartz gabbro

Texture
- hol-cry : holocrystalline
- porph : porphyritic

Mineral
- Q : quartz
- K-f : kali feldspar
- Pl : plagioclase
- Bt : biotite
- Hb : hornblende
- Au : augite
- Hy : hypersthene
- Ol : olivine
- Op : opaque
- Si : silica
- Cpx : clinopyroxene
- Opx : orthopyroxene
- Gl : glass
- Cc : calcite
- Se : sericite
- Chl : chlorite
- Act : actinolite
- Epi : epidote
- tour : tourmaline

- Py : pyrite
- mat : matic mineral
- hydth : hydrothermal alteration
- Conmet : contact metamorphism

Appendix 5 Microphotographs of Thin Section



Sample No.: RB-1

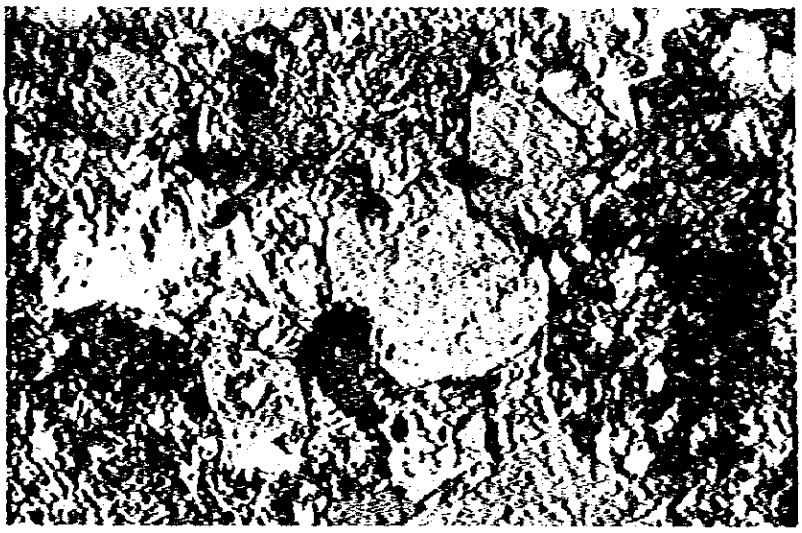
Locality : S. Ledo

Rock name : Tufaceous Sand stone (actf)

qt: quartz
pl: plagioclase
ho: hornblende

Open nicol

0 0.7㎜



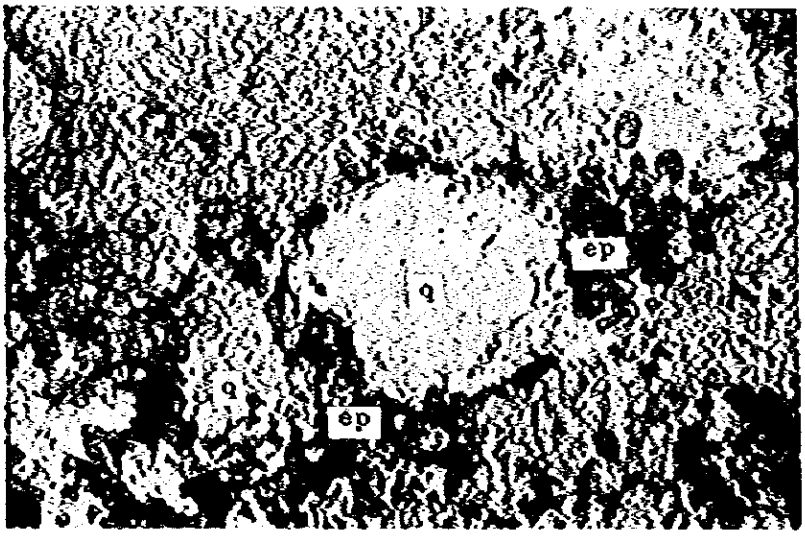
Sample No.: RB-1

Locality : S. Ledo

Rock name : Tufaceous Sand stone (actf)

Crossed nicols

0 0.7㎜



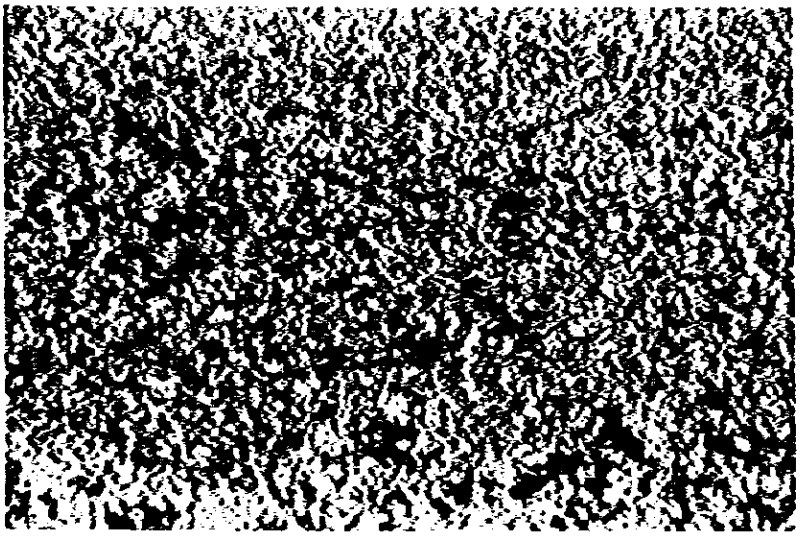
Sample No.: RB-19

Locality : S. Ledo

Rock name : Fine tufaceous Sand stone (actf)

Open nicol

0 0.7㎜



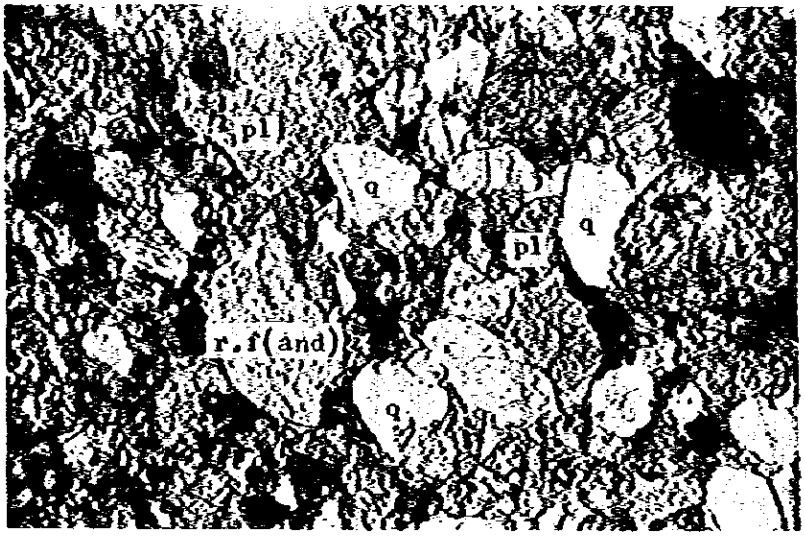
Sample No.: RB-62
Locality : S. Raya
Rock name : Black shale (ms)

9 + Clay + Fe etc

Fe: iron mineral

Open nicol

0 0.7㎜

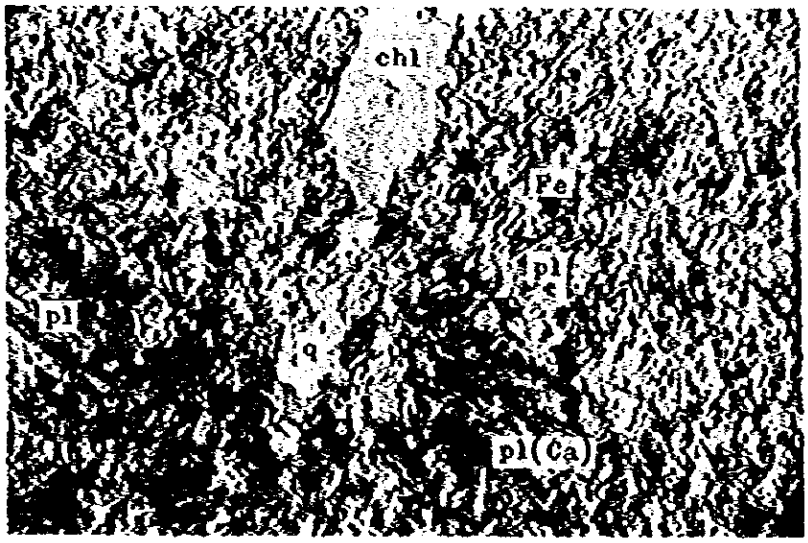


Sample No.: RB-60
Locality : S. Raya
Rock name : Sand stone (ss)

q: quartz
pl: plagioclase
r.f: rock fragmento
and: andesite

Open nicol

0 0.7㎜

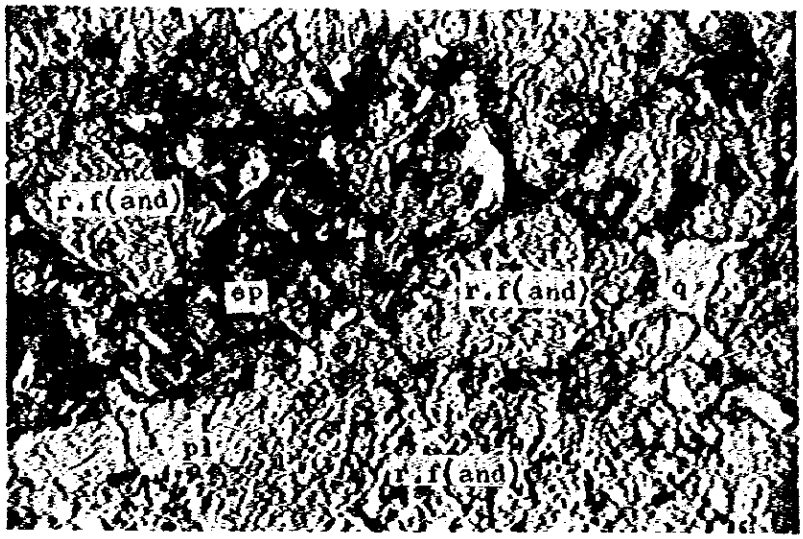


Sample No.: RD-11
Locality : S. Moroi
Rock name : Andesite (and_1)

q: quartz
pl: plagioclase
chl: chrorite
Fe: iron mineral
ca: calcite

Open nicol

0 0.7㎜



Sample No.: RD-23

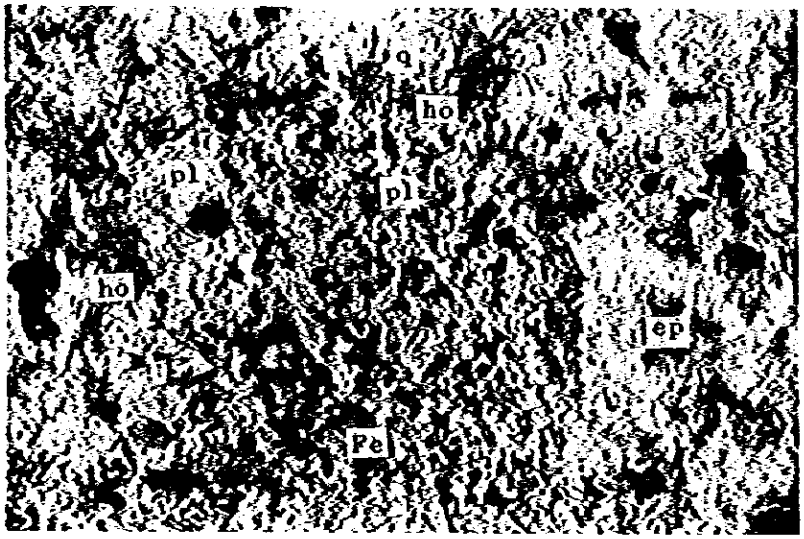
Locality : S. Sebalau

Rock name : Andesite (and1) tuff

q: quartz
pl: plagioclase
ep: epidote
r.f: rock fragment
and: andesite

Open nicol

0 0.7mm



Sample No.: RF-15

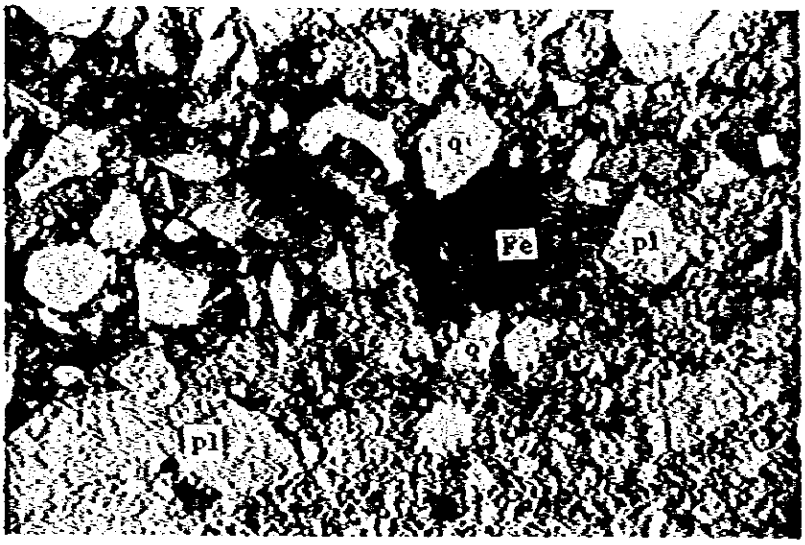
Locality : S. Tahuban

Rock name : Andesite tuff (and1)

q: quartz
pl: plagioclase
ho: hornblende
ep: epidote
Fe: iron mineral

Open nicol

0 0.7mm



Sample No.: RF-8

Locality : S. Kersik

Rock name : Dacitic crystal tuff (da)

q: quartz
pl: plagioclase
Fe: iron mineral

Open nicol

0 0.7mm

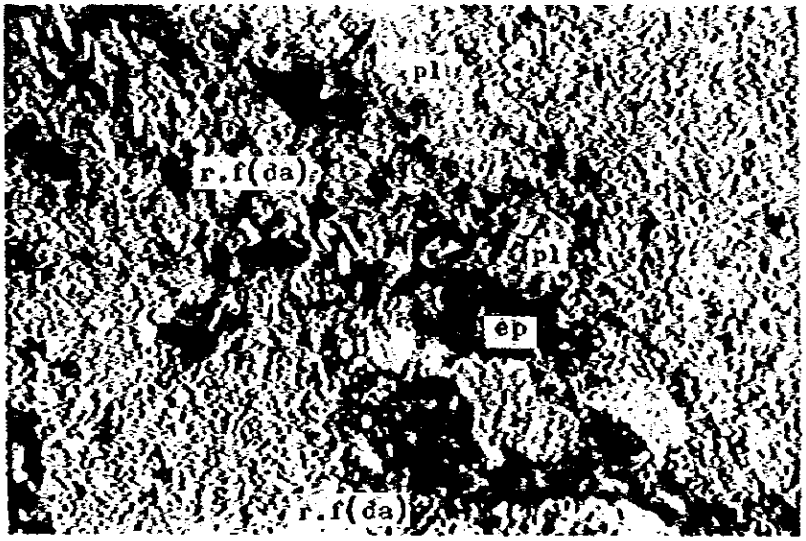
Sample No.: RF-8

Locality : S. Kersik

Rock name : Dacitic crystal tuff (da)

Crossed nicols

0 0.7mm



Sample No.: RF-37

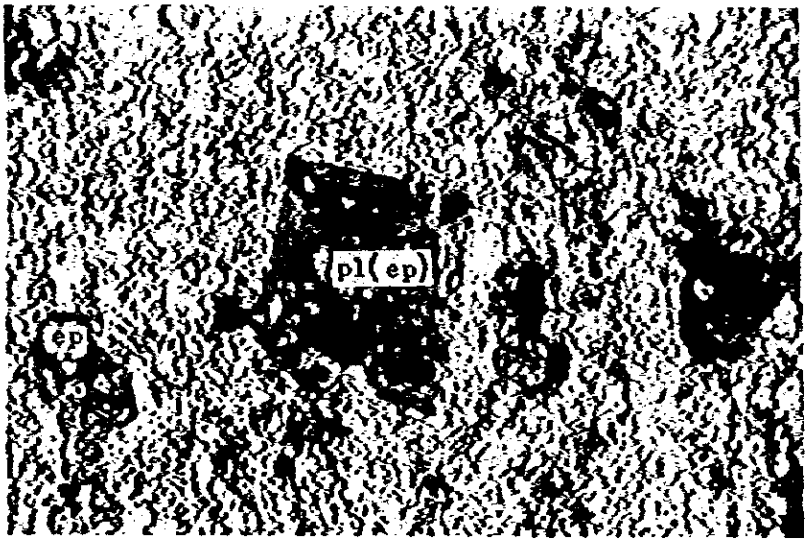
Locality : S. Sali

Rock name : Andesite lapilli tuff (andtf)

pl: plagioclase
ep: epidote
nf: rock fragment
da: dacite

Open nicol

0 0.7mm



Sample No.: RF-64

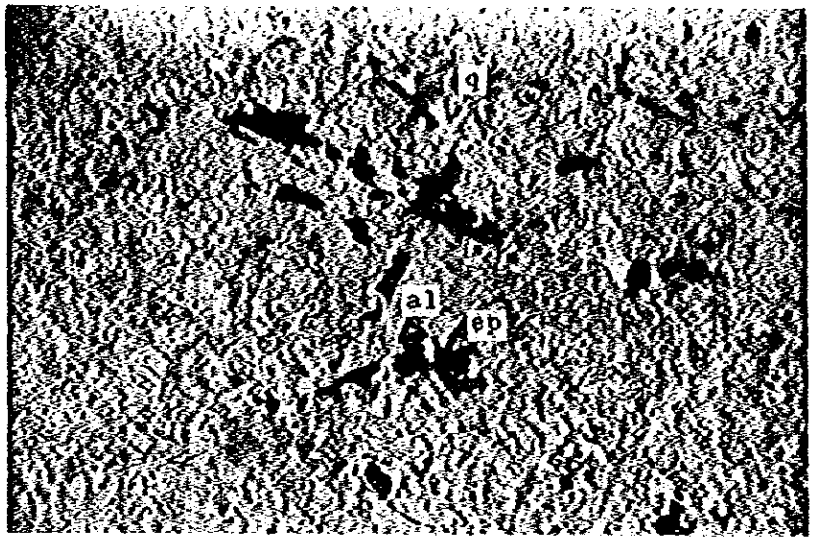
Locality : S. Setona

Rock name : Dacite (datf)

pl: plagioclase
ep: epidote

Open nicol

0 0.7mm



Sample No.: Rp-59

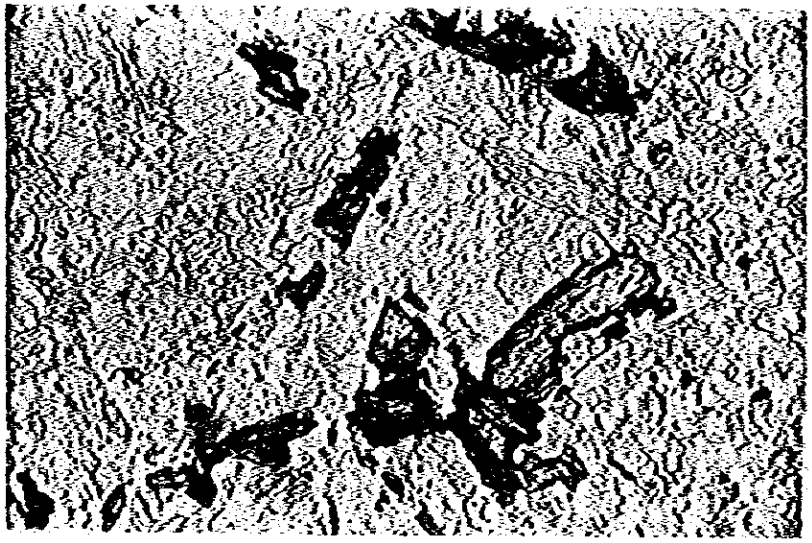
Locality . : S. Pemulut

Rock name : Altered docite (datf)

q: quartz
ep: epidote
al: albite

Open nicol

0 0.7mm



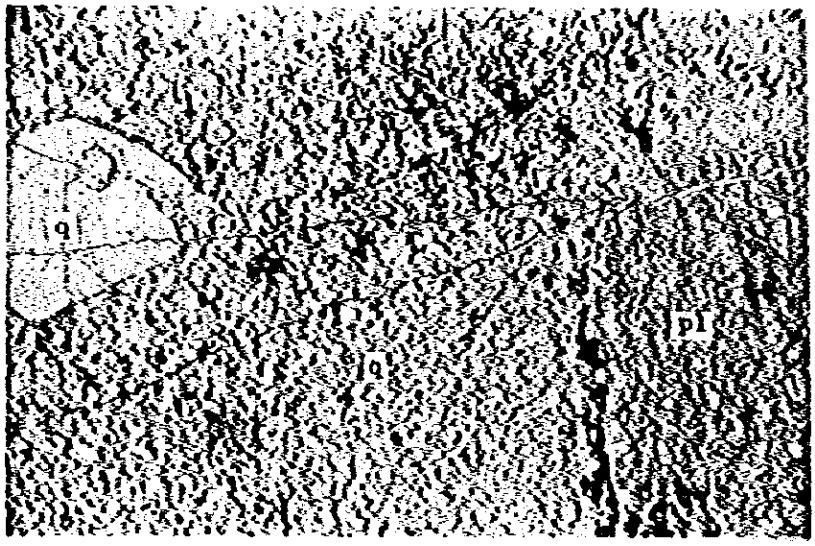
Sample No.: Rp-59

Locality : S. Pemulut

Rock name : Altered dacite (datf)

Open nicol

0 0.3mm



Sample No.: RF-43

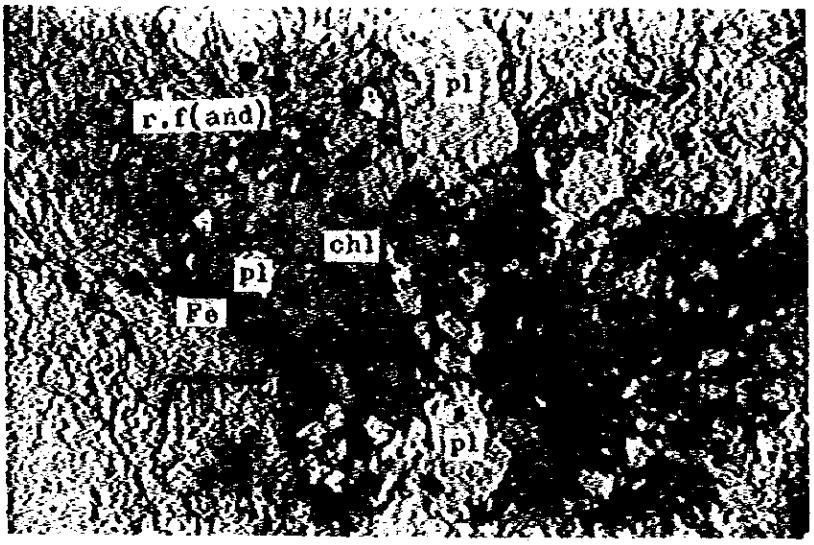
Locality : Karaban

Rock name : Plagio-rhyolite (datf)

q: quartz
pl: plagioclase

Open nicol

0 0.7mm



Sample No.: RA-33

Locality : S. Semoa Tapang

Rock name : Tuff breccia (tbr)

pl: plagioclase
chl: chlorite
Fe: iron mineral
r.f: rock fragment
and: andesite

Open nicol

0 0.7mm

Sample No.: RA-33

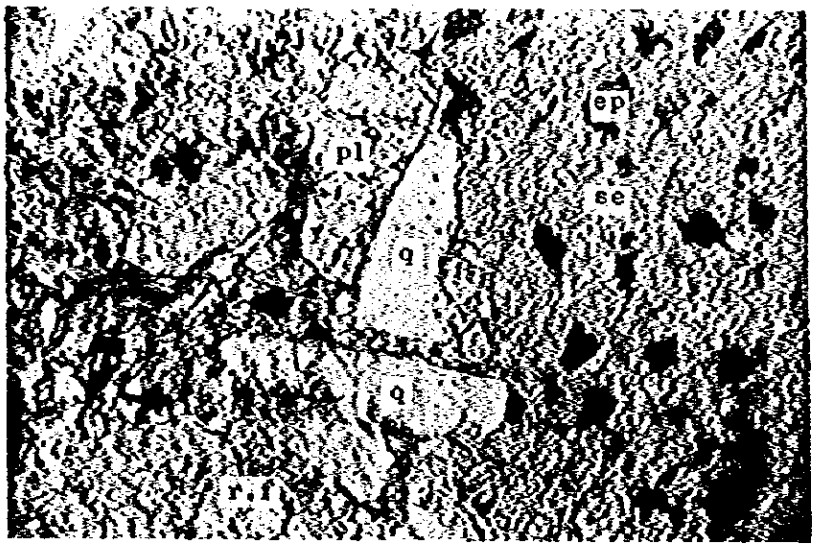
Locality : S. Semoa Tapang

Rock name : Tuff breccia (tbr)

chl: chlorite
r.f: rock fragment

Crossed nicols

0 0.7mm



Sample No.: RB-52

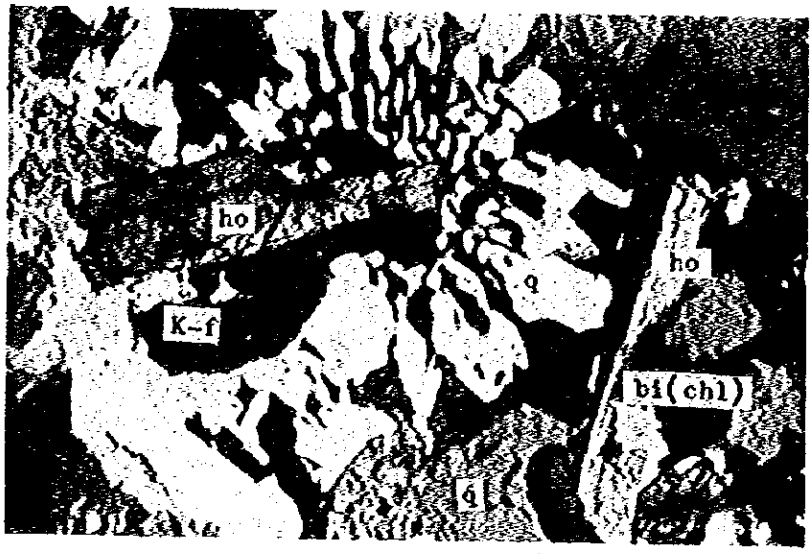
Locality : S. Lunar

Rock name : Lapilli tuff (tf)

q: quartz
pl: plagioclase
ep: epidote
se: sericite
r.f: rock fragment

Open nicol

0 0.7mm



Sample No.: RF-20

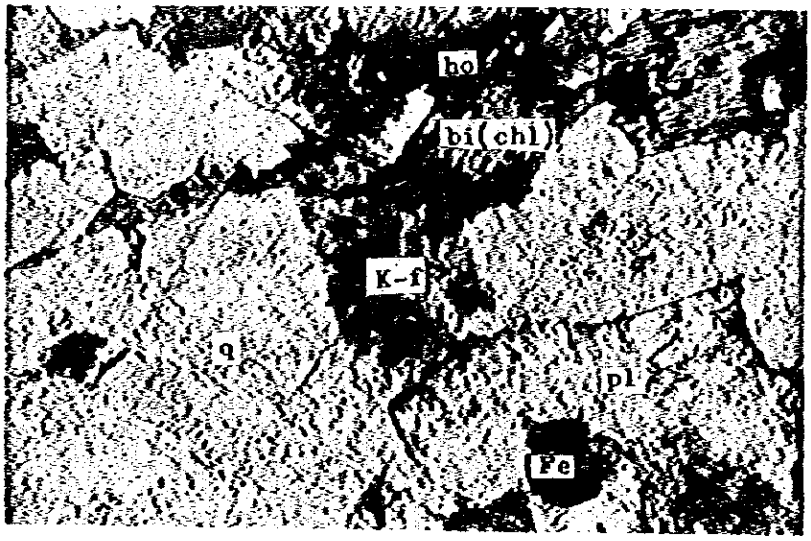
Locality : S. Sembuang

Rock name : Granodiorite (gd)

q: quartz
ho: hornblende
k-f: potassium feldspar
bi: biotite
chl: chlorite

Crossed nicol

0 0.7mm



Sample No.: Rp-19

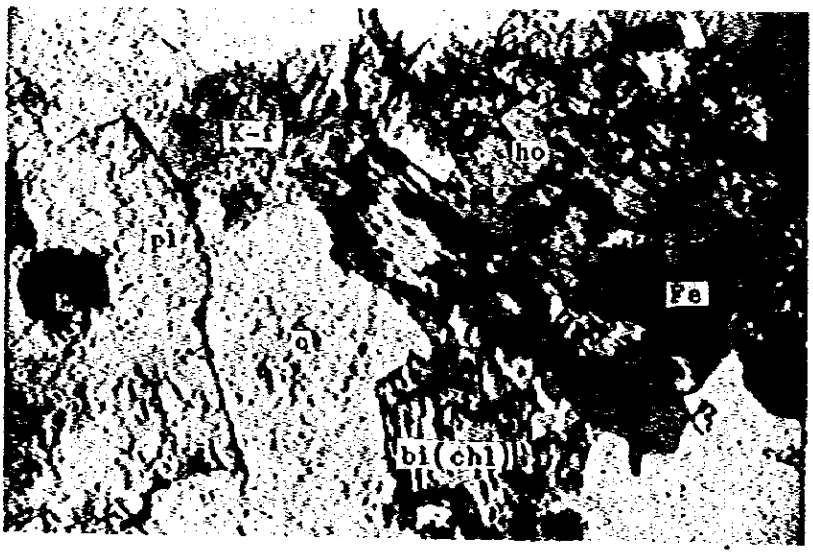
Locality : S. Bala

Rock name : Granodiorite (gd)

q: quartz
pl: plagioclase
ho: hornblende
k-f: potassium feldspar
bi: biotite
chl: chlorite
Fe: iron mineral

Open nicol

0 0.7mm



Sample No.: Rp-19

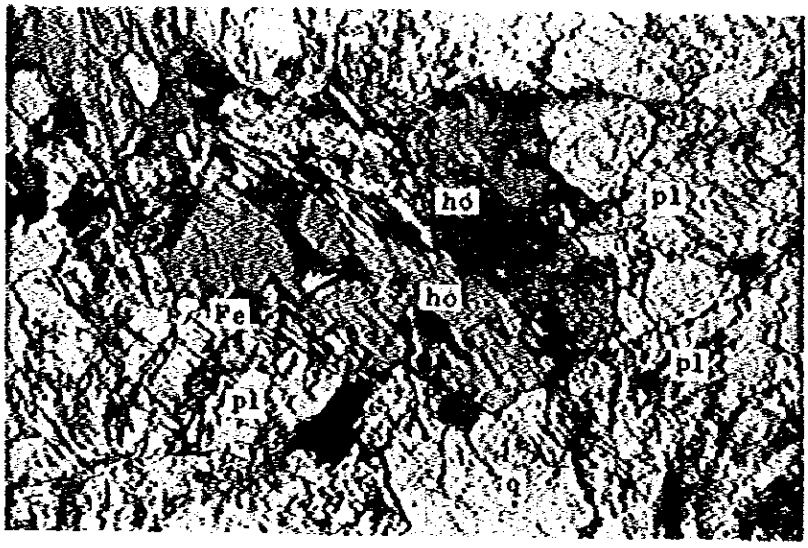
Locality : S. Bala

Rock name : Granodiorite (gd)

q: quartz
pl: plagioclase
ho: hornblende
k-f: potassium feldspar
bi: biotite
chl: chlorite
Fe: iron mineral

Open nicol

0 0.7mm



Sample No.: RE-50

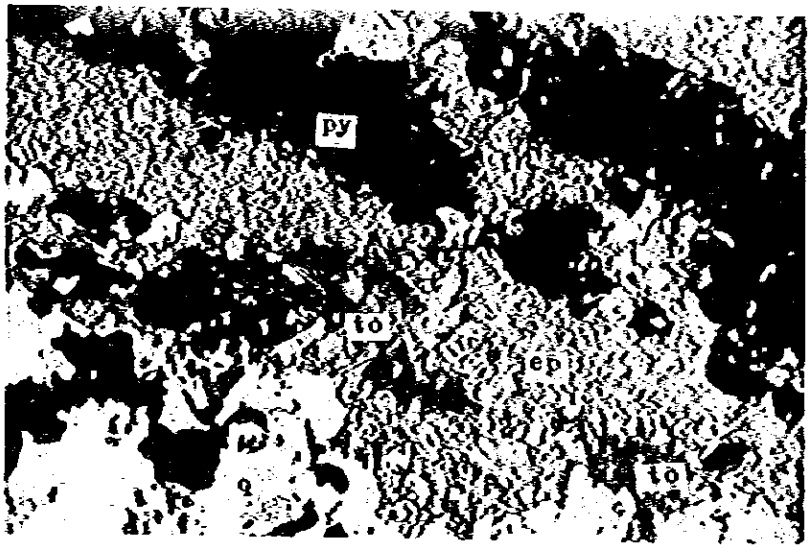
Locality : S. Pehem

Rock name : Quartz diorite (qd)

q: quartz
pl: plagioclase
ho: hornblende
Fe: iron mineral

Open nicol

0 0.7mm



Sample No.: Rn-19

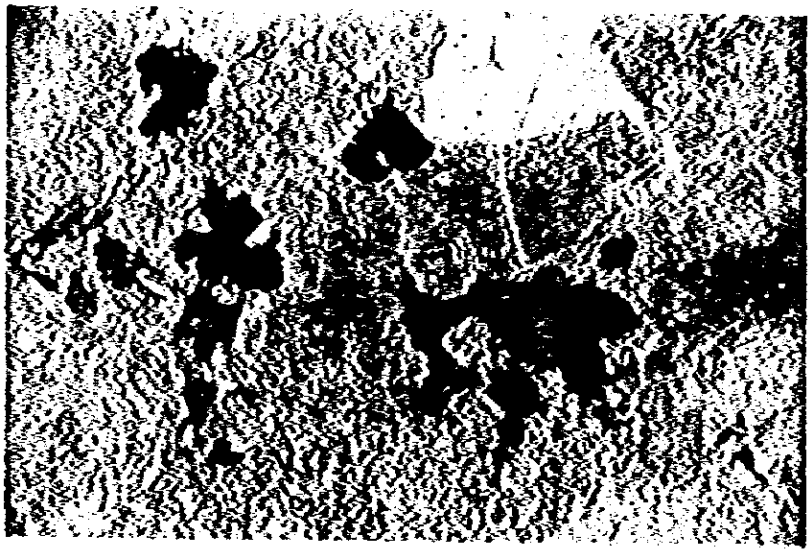
Locality : S. Nempawah

Rock name : Quartz diorite (qd)

q: quartz
ep: epidote
to: tourmaline
py: pyrite

Open nicol

0 0.7mm



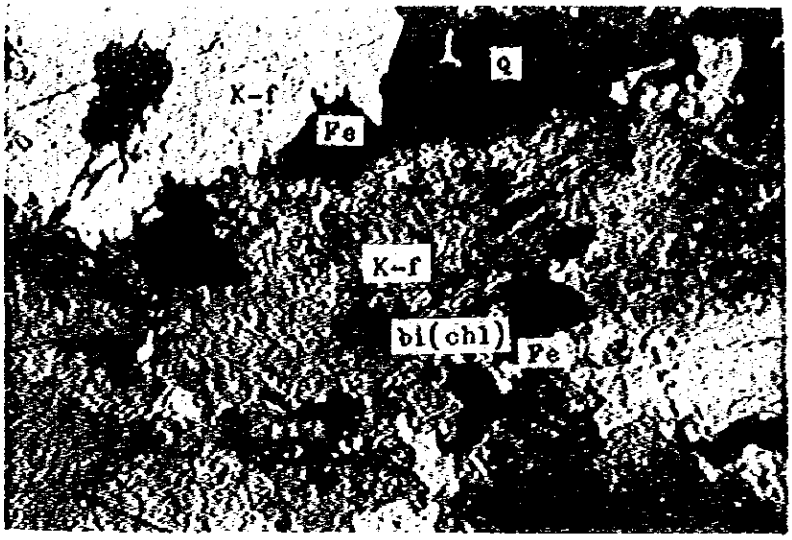
Sample No.: Rn-38

Locality : S. Semade

Rock name : Granite (gr1)

Open nicol

0 0.7mm

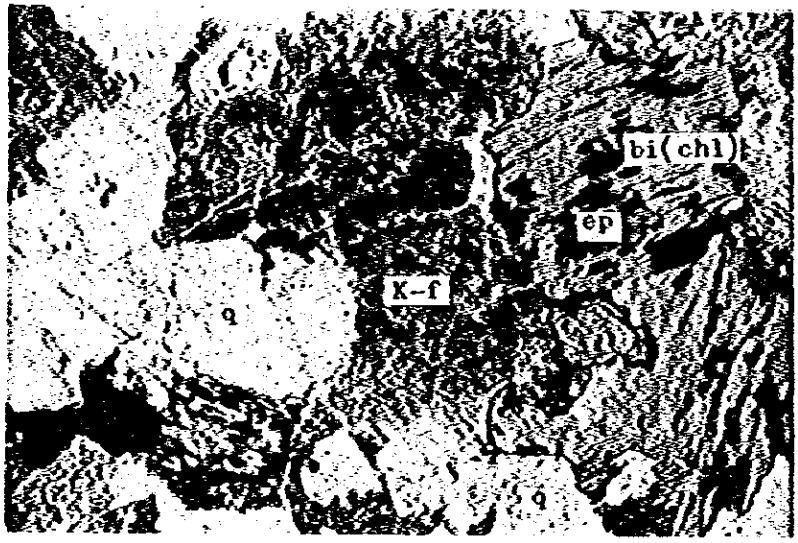


Sample No.: Rn-38
Locality : S. Semade
Rock name : Granite (gr1)

q: quartz
k-f: potassium feldspar
bi: biotite
chl: chlorite
Fe: iron mineral

Crossed nicols

0 0.7mm

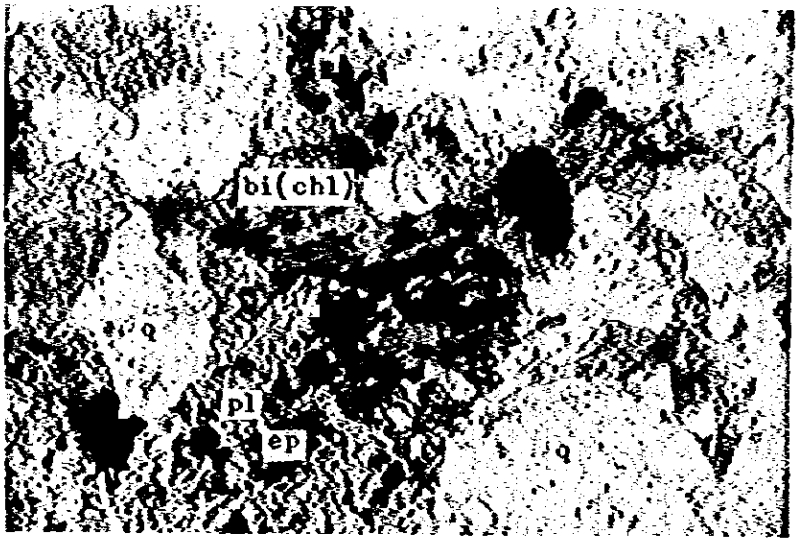


Sample No.: RF-32
Locality : S. Sembuang
Rock name : Granit (gr1)

q: quartz
ep: epidote
k-f: potassium feldspar
bi: biotite
chl: chlorite

Open nicol

0 0.7mm

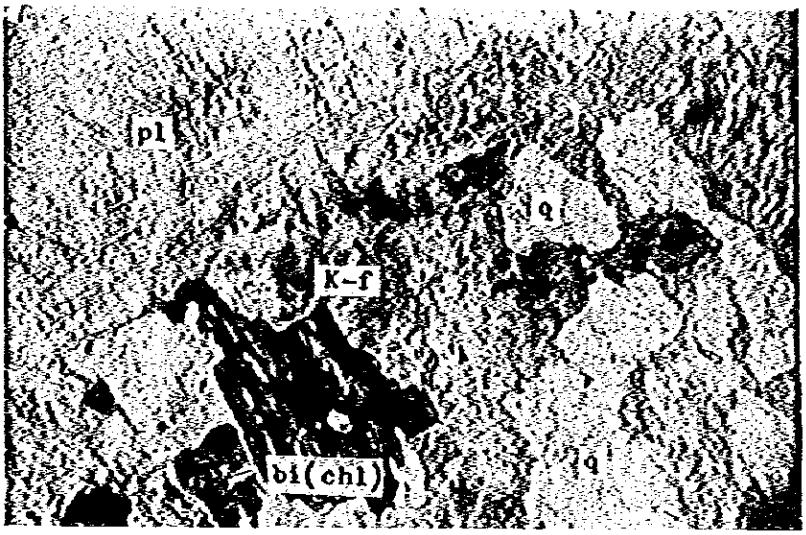


Sample No.: RE-30
Locality : S. Sakung
Rock name : Granit (gr2)

q: quartz
pl: plagioclase
ep: epidote
bi: biotite
chl: chlorite

Open nicol

0 0.7mm

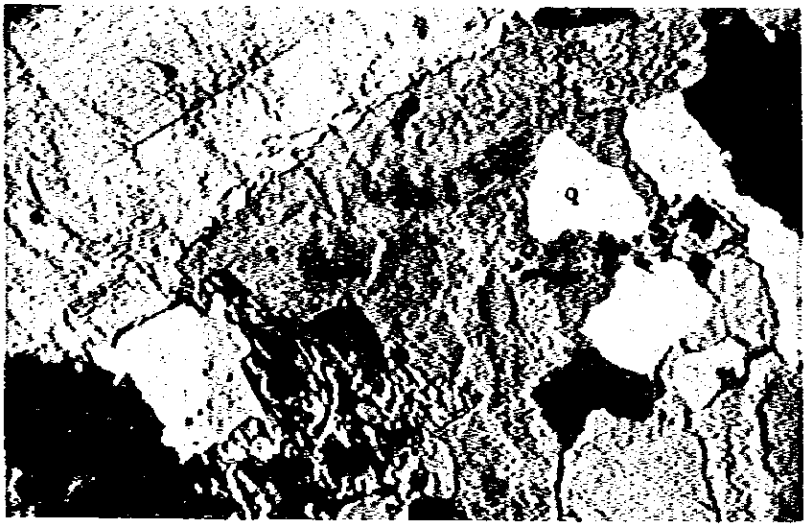


Sample No.: RE-80
Locality : S. Setona
Rock name : Granit (gr 2)

q: quartz
pl: plagioclase
k-f: potassium feldspar
bi: biotite
chl: chlorite

Open nicol

0 0.7mm

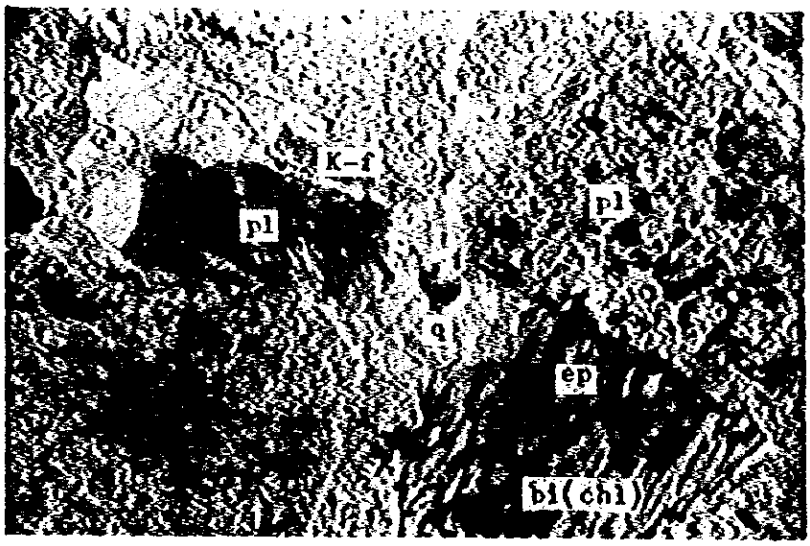


Sample No.: RE-80
Locality : S. Setona
Rock name : Granit (gr 2)

q: quartz

Crossed nicols

0 0.7mm

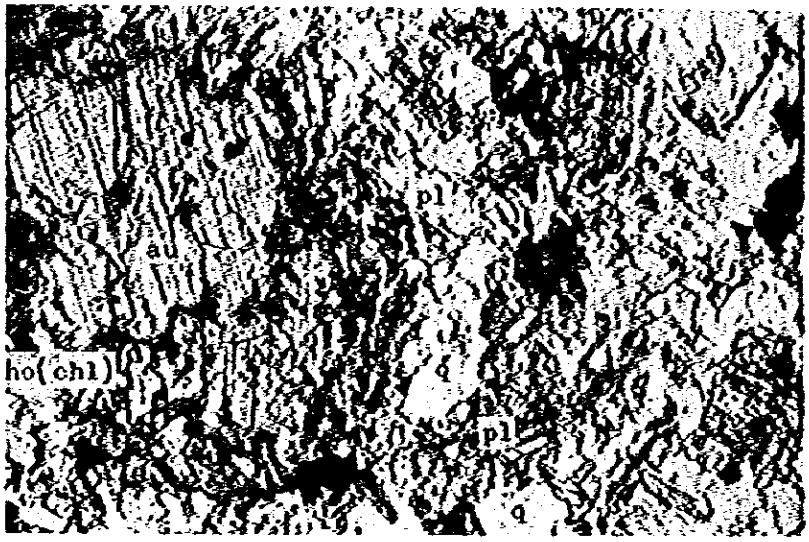


Sample No.: Rn-32
Locality : S. Semade
Rock name : Granite (gr 2)

q: quartz
pl: plagioclase
ep: epidote
k-f: potassium feldspar
bi: biotite
chl: chlorite

Open nicol

0 0.7mm



Sample No.: RD-18

Locality : G. Kelan

Rock name : Porphyritic quartz gabbro (qgb)

q: quartz
pl: plagioclase
ho: hornblende
chl: chlorite
au: augite

Open nicol

0 0.7mm

Sample No.: RD-28

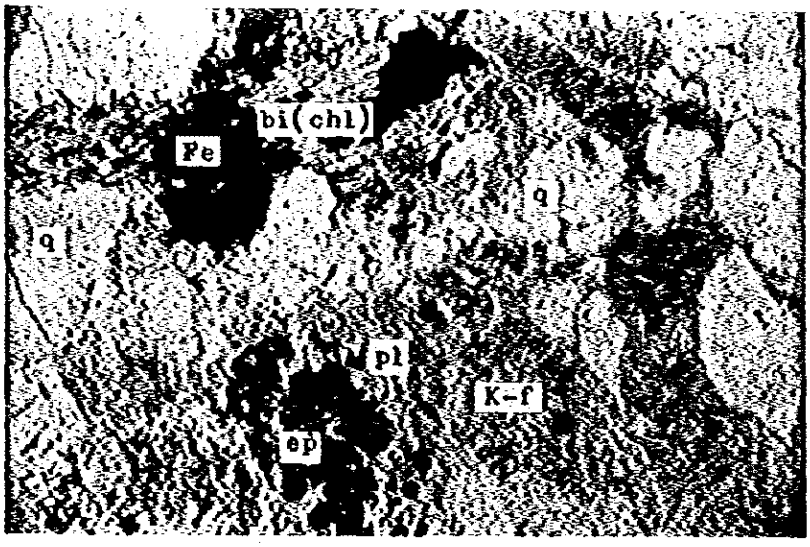
Locality : G. Pandan

Rock name : Quartz gabbro (qgb)

q: quartz
pl: plagioclase
ho: hornblende
au: augite

Open nicol

0 0.7mm



Sample No.: RD-52

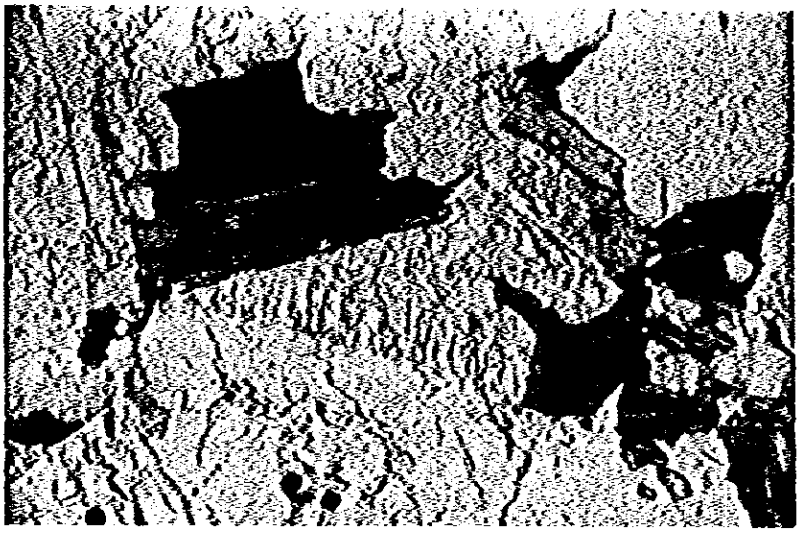
Locality : S. Bani

Rock name : Hornblende-biotite tonalite (tn 1)

q: quartz
pl: plagioclase
ep: epidote
k-f: potassium feldspar
bi: biotite
chl: chlorite
Fe: iron mineral

Open nicol

0 0.7mm



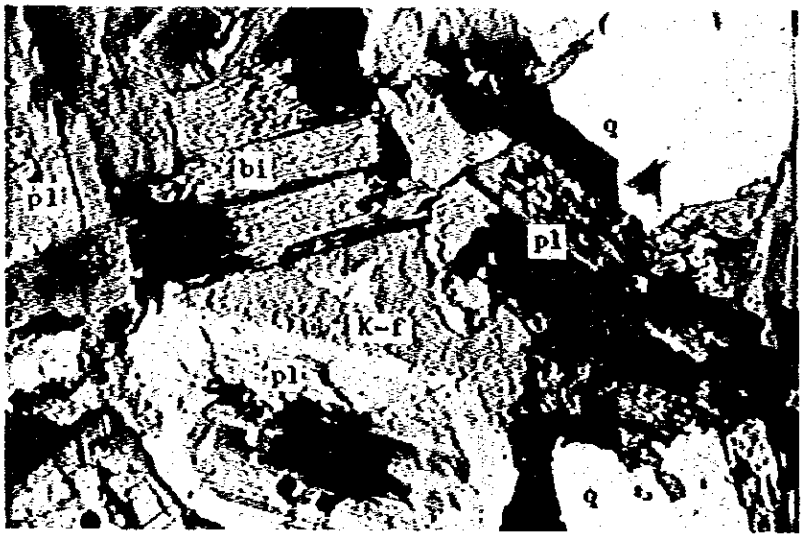
Sample No.: RB-24

Locality : S. Bamua

Rock name : Hornblende-biotite tonalite (tn^2)

Open nicol

0 0.7mm



Sample No.: RB-24

Locality : S. Bamua

Rock name : Hornblend-biotite tonalite (tn^2)

q: quartz
pl: plagioclase
k-f: potassium feldspar
bi: biotite

Crossed nicols

0 0.7mm

Sample No.: RB-10

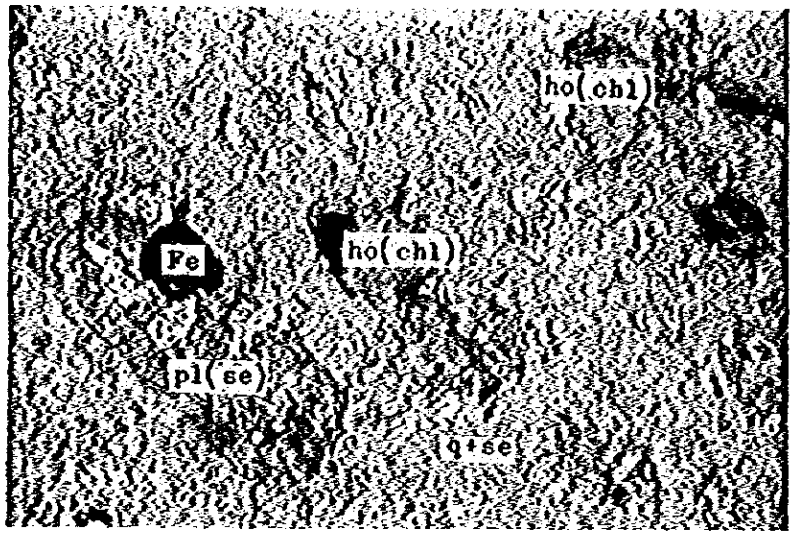
Locality : S. Bamua

Rock name : Quartz porphyry (qp)

q: quartz
pl: plagioclase
bi: biotite

Open nicol

0 0.7mm



Sample No.: RB-23

Locality : S. Ledo

Rock name : Altered dacite (alttn)

q: quartz
pl: plagioclase
ho: hornblende
chl: chlorite
se: sericite
Fe: iron mineral

Open nicol

0 0.7mm

Sample No.: RC-27

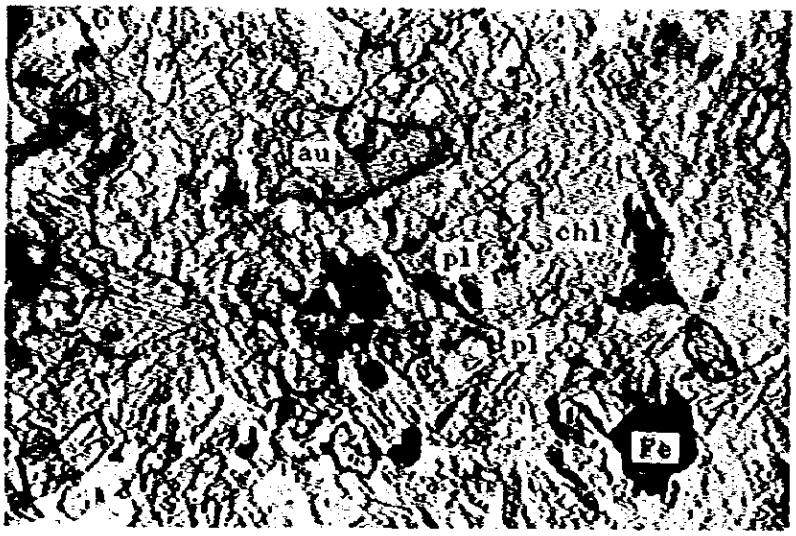
Locality : S. Cebol

Rock name : Dolerite (dole)

pl: plagioclase
chl: chlorite
au: augite
Fe: iron mineral

Open nicol

0 0.7mm



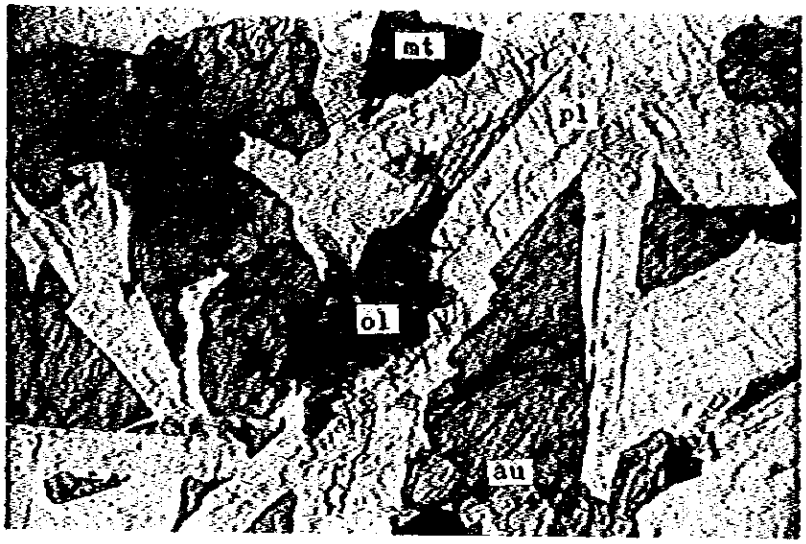
Sample No.: RC-27

Locality : S. Cebol

Rock name : Dolerite (dole)

Crossed nicols

0 0.7mm

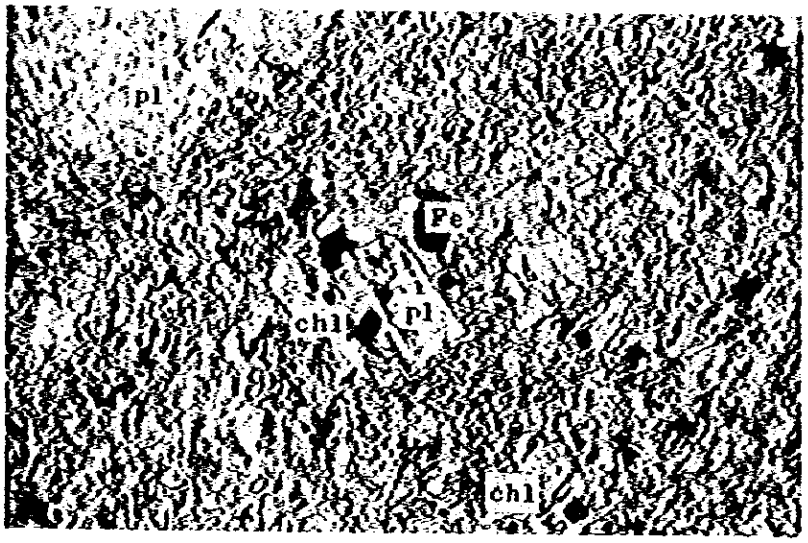


Sample No.: Rp-25
Locality : S. Aja
Rock name : Dolerite (dole)

pl: plagioclase
au: augite
ol: olivine
mt: magnetite

Open nicol

0 0.7mm



Sample No.: RB-26
Locality : S. Bamua
Rock name : Altered andesite (and 2)

pl: plagioclase
chl: chlorite
Fe: iron mineral

Open nicol

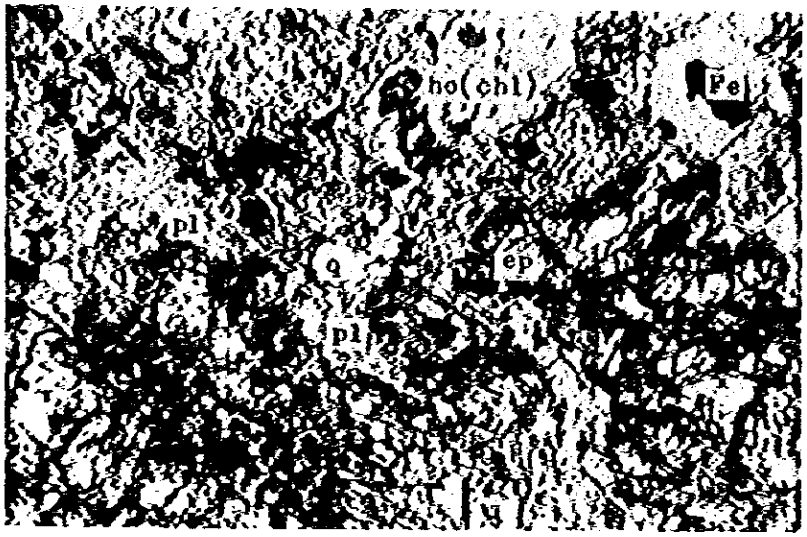
0 0.7mm

Sample No.: RB-72
Locality : G. Serantak
Rock name : Dacite (dap)

q: quartz
pl: plagioclase
ep: epidote

Crossed nicol

0 0.7mm



Sample No.: Rq-59

Locality : S. Setona

Rock name : Dacite (dap)

q: quartz
pl: plagioclase
ep: epidote
ho: hornblende
chl: chlorite
Fe: iron mineral

Open nicol

0 0.7mm

Appendix 6 Microscopic Observation of Polished Section

Area	Sanple No	Location	Occurrance	Cp	Cc	Cov	Sph	Mol	Py	Pyh	Got	Remarks
Sirih Tonalite	R B - 33	S. Sirih	Vein	○			△					Mol by megascopic observation
	R B - 48	S. Ledo	Dissemination	○			○					
Banyl Tonalite	Batu Aji	S. Bani	Network								◎	Au 1.0 g/t
	R K - 29	S. Bani	Vein	◎	△							green Cu stain
	R I - 62	S. Bani	Veinlet					○				
Southern Granitoid rocks	R E - 71	S. Lao	Vein	△					○			
	Rm - 25	S. Mempawah	Dissemination	○	△							
	Rn - 4	S. Mempawah	Dissemination						○			
	R o - 5	S. Bumbung	Dissemination	◎								
Serantac Dacite	Serantak (A)	G. Serantak	Massive	△						◎		Au 0.2 g/t
	Serantak (B)	S. Serantak	Massive	△						◎		

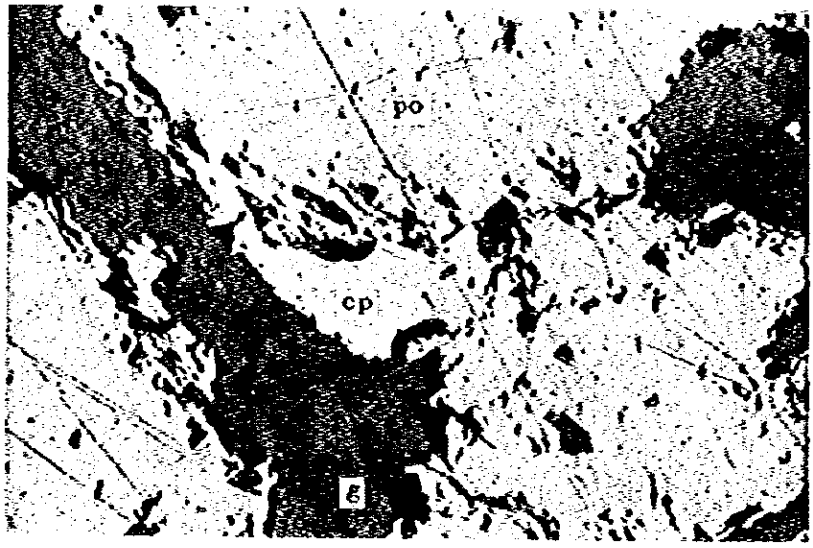
Cp : Chalcopyrite
Cc : Chalcocite
Cov : Covellino
Sph : Sphalerite
Mol : Molybdenite
Py : Pyrite
Pyh : Pyrrhotite
Got : Goethite

Appendix 7 Microphotographs of Polished Section

Sample No.: Serantak (A)
Locality : G. Serantac
Name of Ore : Chalcopyrite bearing pyrrhotite

cp: chalcopyrite
po: pyrrhotite

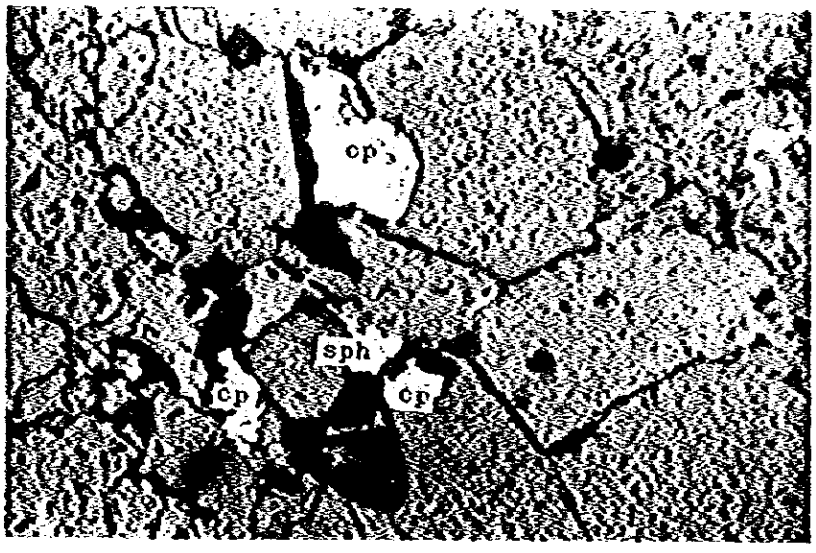
0 0.3mm



Sample No.: Serantak (B)
Locality : Chalcopyrite
Name of Ore : Chalcopyrite bearing pyrrhotite

cp: chalcopyrite
po: pyrthotite
g: gangue

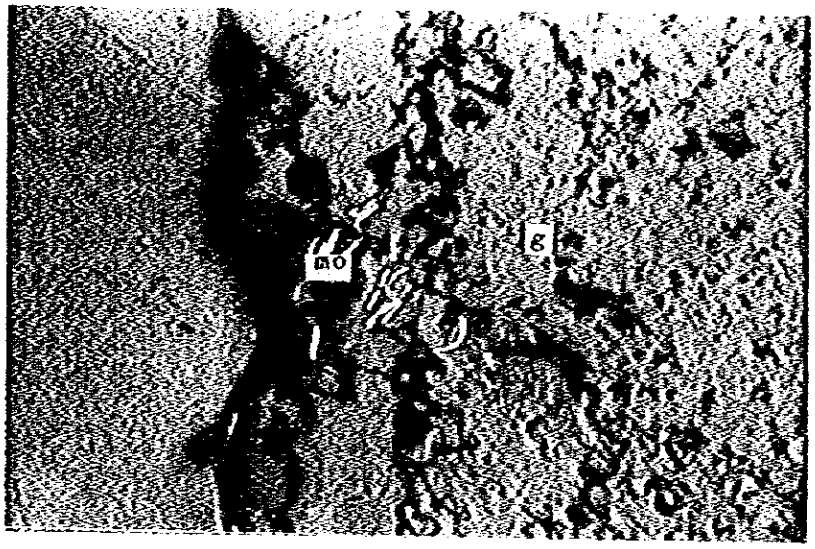
0 0.3mm



Sample No.: RB-33
Locality : G. Takap
Name of Ore : RB-33

cp: chalcopyrite
sph: sphalerite
g: gangue

0 0.3mm



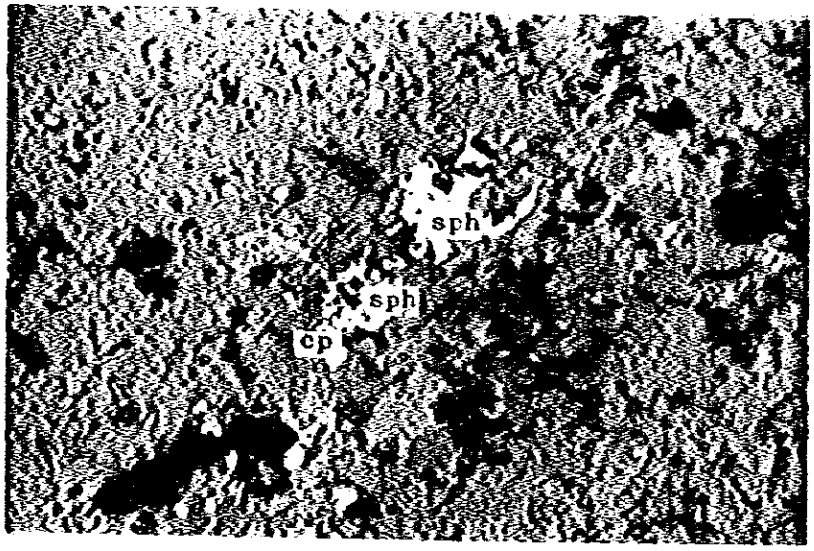
Sample No.: R1-62

Locality : S. Temahas

Name of Ore : Molybdenite in tonalite

mo: molybdenite
g: gangue

0 0.3㎜



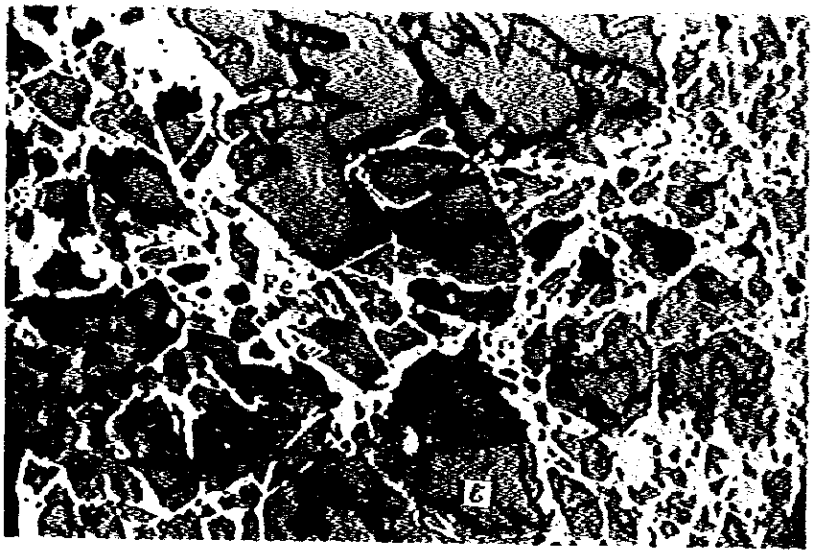
Sample No.: R1-62

Locality : S. Temahas

Name of Ore : Molybdenite in tonalite

cp: chalcopyrite
sph: sphalerite

0 0.3㎜



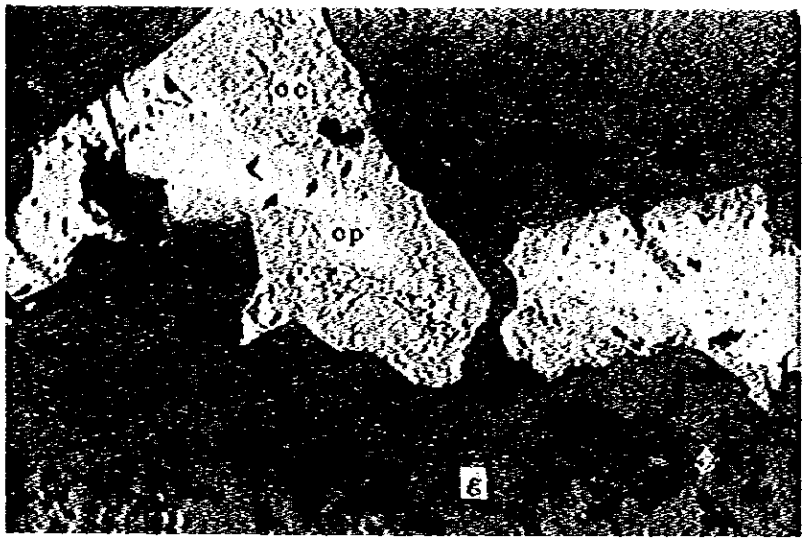
Sample No.: Batu Aji

Locality : Batu Aji

Name of Ore : Limonite network

Fe: limonite
g: gangue

0 0.3㎜



Sample No.: Rk-29

Locality : Batu Aji

Name of Ore : Chalcopyrite
chalrocite

cp: chalcopyrite
cc: chalcocite
g: gangue

0 0.3mm

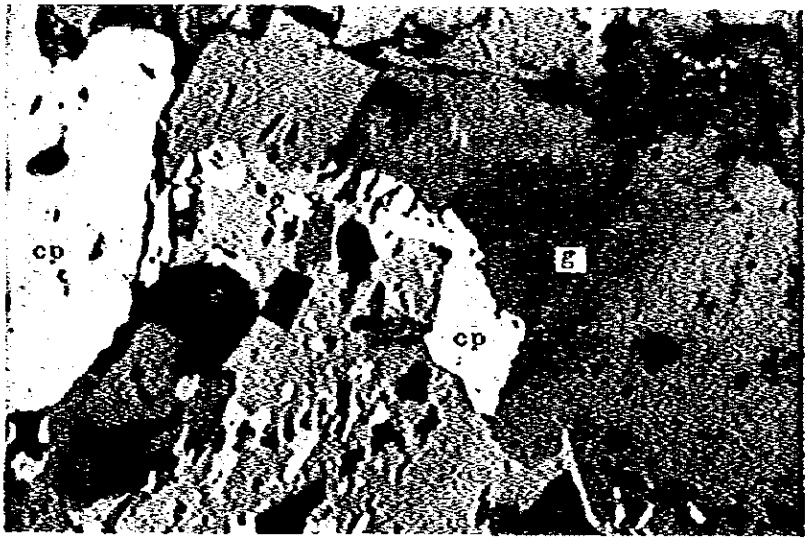
Sample No.: RE-71

Locality : S. Lao

Name of Ore : Pyrite

py: pyrite
g: gangue

0 0.3mm



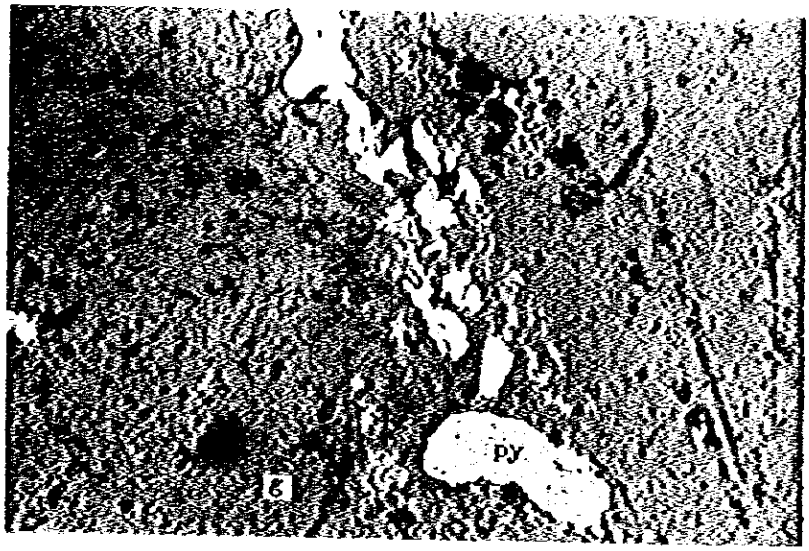
Sample No.: Rm-25

Locality : G. Sekeh

Name of Ore : Chalcopyrite

cp: chalcopyrite
g: gangue

0 0.3mm



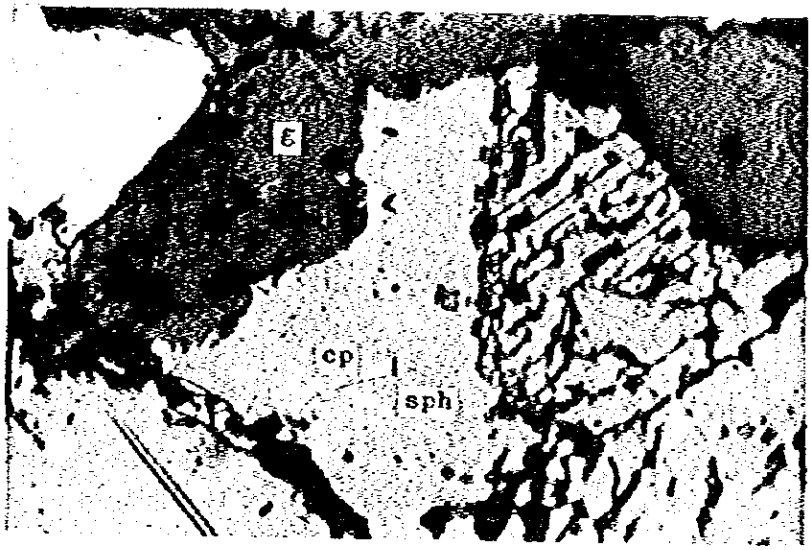
Sample No.: Rn-4

Locality : S. Mempawah

Name of Ore : Pyrite bearing guartz vein

py: pyrite
g: gangue

0 0.3mm



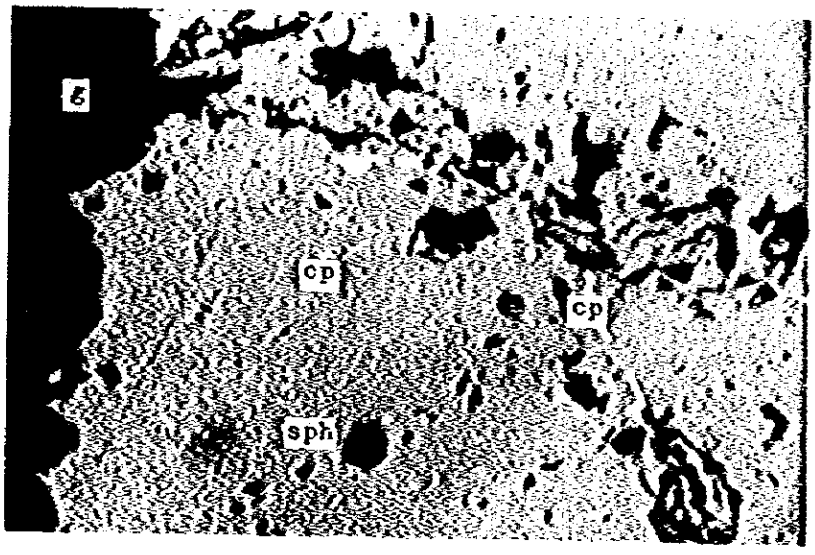
Sample No.: RB-48

Locality : G. Mahmud

Name of Ore : Chalcopyrite dot bearing sphalerite

cp: chalcophyrite
sph: sphalerite
g: gangue

0 0.3mm



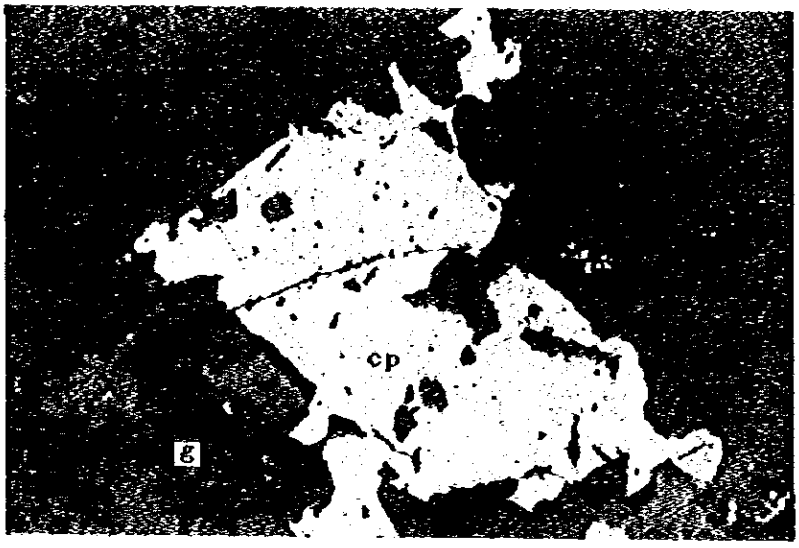
Sample No.: RB-48

Locality : G. Mahmud

Name of Ore : Chalcopyrite dot bearing sphalerite

cp: chalcopyrite
sph: sphalerite

0 0.3mm



Sample No.: Ro-5
Locality : S. Bumbung
Name of Ore : Chalcopyrite

cp: chalcopyrite
g: gangue

0 0.3mm

Appendix 8 Assay Results of Geochemical Samples

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
A	1	I - 1	15 - 95	S. Rerong	369		34	1	5.6
A	2	I - 2	"	"	44		46	<1	5.8
A	3	I - 3	"	"	44		106	<1	5.8
A	4	I - 4	10 - 95	S. Mengkaman	23		69	1	6.0
A	5	I - 6	"	"	19		75	1	5.8
A	6	I - 7	15 - 95	"	29		109	1	5.8
A	7	I - 8	"	S. Muan Ama	21		59	1	5.8
A	8	I - 9	"	S. Melabu	38		86	<1	5.6
A	9	I - 11	"	"	19		130	1	6.0
A	10	I - 12	"	"	26		86	2	6.0
A	11	I - 14	"	"	26		126	1	6.0
A	12	I - 17	"	S. Sansak	36		95	2	6.2
A	13	I - 18	"	"	56		75	1	6.0
A	14	I - 19	"	"	77		81	1	6.0
A	15	I - 20	"	"	42		69	1	6.0
A	16	I - 21	"	"	19		74	<1	6.2
A	17	I - 22	"	S. Semoa Karuh	13		57	1	5.6
A	18	I - 23	"	"	15		84	<1	6.0
A	19	I - 24	"	"	27		93	<1	5.6
A	20	I - 25	"	"	56		285	1	5.6
A	21	I - 26	20 - 95	"	21		89	<1	5.6
A	22	I - 27	15 - 95	S.Semoa Tapang	18		81	<1	5.8
A	23	I - 29	"	"	10		139	<1	5.4
A	24	I - 30	"	"	19		159	<1	5.6
A	25	I - 32	20 - 95	"	23		144	<1	5.4
A	26	I - 33	"	"	19		104	<1	5.4
A	27	I - 34	15 - 90	S. Reis	22		86	<1	5.8
A	28	I - 35	10 - 90	S. Raya	11		54	1	5.8
A	29	I - 38	15 - 90	S. Mandor	17		80	<1	5.4
A	30	I - 39	10 - 90	"	35		99	<1	5.6
A	31	I - 40	"	"	17		119	<1	5.6
A	32	I - 42	"	"	6		21	<1	5.6

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
A	33	I - 43	15 - 95	S. Raya	7		21	1	5.4
A	34	I - 44	15 - 90	S. Semoa Karuh	11		58	1	5.4
A	35	I - 45	"	S. Buluh	17		97	1	5.4
A	36	I - 46	"	S. Raya	15		65	<1	5.6
A	37	I - 47	"	S. Sepai	11		59	<1	5.6
A	38	I - 48	"	S. Raya	11		78	<1	6.0
A	39	I - 49	"	"	11		106	<1	6.2
A	40	I - 50	"	"	9		72	<1	6.2
A	41	I - 51	"	"	18		71	<1	6.0
A	42	I - 53	"	"	18		55	<1	5.8
A	43	I - 54	20 - 90	S. Sepai	23		93	<1	5.6
A	44	I - 55	15 - 90	"	21		74	<1	5.8
A	45	I - 57	20 - 90	"	63		127	<1	5.4
A	46	I - 58	"	"	405		341	2	5.6
A	47	I - 60	"	"	22		122	1	5.2
A	48	I - 61	"	"	14		71	<1	5.4
A	49	I - 62	"	"	33		120	<1	5.6
A	50	I - 63	20 - 95	"	17		89	<1	5.4
A	51	I - 64	20 - 90	"	12		75	<1	5.2
A	52	I - 65	20 - 95	"	19		82	<1	5.4
A	53	I - 66	"	"	14		92	<1	5.4
A	54	I - 67	20 - 90	S. Side	22		87	<1	5.8
A	55	I - 68	"	S. Sebowak	28		142	2	6.2
A	56	I - 70	"	S. Sepai	17		50	<1	5.8
A	57	I - 71	"	"	19		91	<1	6.0
A	58	I - 73	"	S. Sebowak	9		17	<1	5.8
A	59	I - 74	"	"	8		30	<1	5.8
A	60	I - 76	"	"	8		13	<1	6.0
A	61	I - 77	15 - 90	S. Mau	27		95	<1	5.6
A	62	I - 78	"	"	21		62	<1	5.4
A	63	I - 79	"	"	9		38	<1	5.4
A	64	I - 80	"	"	16		136	<1	5.4

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
A	65	I - 81	15 - 90	S. Mau	27		136	<1	5.6
A	66	I - 82	"	"	22		44	<1	5.6
A	67	I - 83	"	S. Semidang	13		40	<1	6.0
A	68	I - 84	"	S. Mau	10		77	<1	5.8
A	69	I - 85	"	"	13		101	<1	5.8
A	70	I - 86	"	"	29		46	<1	6.0
A	71	I - 87	"	"	11		46	<1	6.0
A	72	I - 88	20 - 90	S. Nasan	10		48	<1	6.0
A	73	II - 1	25 -100	S. Ledo	64	17	51	<1	6.2
A	74	II - 2	"	S. Bamua	69	17	55	<1	5.8
A	75	II - 3	20 -100	"	28	7	73	<1	6.0
A	76	II - 4	"	"	100	20	54	2	5.4
A	77	II - 5	"	"	54	10	53	<1	5.8
A	78	II - 6	25 -100	S. Banan	45	15	65	<1	5.8
A	79	II - 7	20 -100	"	22	7	106	<1	6.2
A	80	II - 9	"	"	21	7	121	<1	6.0
A	81	II - 11	25 - 95	S. Ledo	31	10	106	<1	6.2
A	82	II - 12	"	"	35	10	88	<1	6.0
A	83	II - 13	"	"	42		58	<1	6.2
A	84	II - 14	"	"	23		89	<1	6.0
A	85	II - 16	20 - 95	S. Sirih	155	40	74	2	6.2
A	86	II - 17	"	S. Ledo	91	37	66	<1	6.2
A	87	II - 18	25 - 95	"	48		77	<1	6.2
A	88	II - 21	20 -100	S. Bamua	278	55	70	3	6.2
A	89	II - 22	"	"	19	7	67	<1	6.4
A	90	II - 24	"	"	92	17	55	1	6.0
A	91	II - 25	"	"	151	24	52	2	6.2
A	92	II - 26	"	"	118	20	47	2	6.2
A	93	II - 28	20 - 95	"	79	17	52	3	6.2
A	94	II - 29	"	"	76	17	68	4	6.0
A	95	II - 30	25 -100	S. Ledo	71		65	1	5.8
A	96	II - 31	"	"	44		47	1	6.0

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
A	97	II - 32	25 -100	S. Lunar	25		83	1	6.2
A	98	II - 35	20 - 95	S. Sirih	178	52	87	4	6.2
A	99	II - 36	"	"	187	40	68	3	6.2
A	100	II - 40	"	"	203	43	92	4	6.0
A	101	II - 43	"	"	75	17	70	1	5.8
A	102	II - 44	"	"	96	27	92	4	5.8
A	103	II - 46	"	"	224	65	70	12	5.6
A	104	II - 47	"	S. Ledo	61	20	30	12	6.0
A	105	II - 48	"	"	157	35	86	10	6.0
A	106	II - 52	25 - 95	"	70		96	2	5.6
A	107	II - 54	"	"	77		85	<1	5.6
A	108	II - 55	20 - 95	"	36		115	<1	5.6
A	109	II - 56	25 - 95	"	58		191	<1	5.8
A	110	II - 57	20 - 95	"	70		135	<1	5.8
A	111	II - 58	"	"	110	33	104	1	6.2
A	112	II - 59	"	"	27		99	<1	6.0
A	113	II - 60	"	"	27		115	<1	6.0
A	114	II - 62	"	"	79		76	1	5.6
A	115	II - 63	"	"	28		109	<1	5.6
A	116	II - 64	25 -100	S. Lunar	12	9	60	<1	6.2
A	117	II - 66	"	"	45	20	60	<1	6.2
A	118	II - 67	"	"	23	10	126	<1	6.2
A	119	II - 68	"	"	12		127	<1	5.6
A	120	II - 69	"	"	16		72	<1	5.6
A	121	II - 70	"	"	34		71	<1	5.6
A	122	II - 72	20 -100	S. Banua	64	15	34	<1	5.8
A	123	II - 74	"	"	197	31	27	<1	5.6
A	124	II - 75	"	"	71	14	27	<1	5.8
A	125	II - 76	"	S. Banan	27	12	74	<1	6.8
A	126	II - 78	"	"	28	9	71	<1	6.2
A	127	II - 79	"	"	29	9	72	<1	6.2
A	128	II - 80	"	"	94	23	58	<1	6.2

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu T-Cu	Cu Cx-Cu	Zn	Mo	
A	129	II - 81	20 -100	S. Banan	30	8	46	<1	6.4
A	130	II - 82	"	"	33	8	73	<1	6.2
A	131	II - 83	"	"	101	24	62	<1	6.4
A	132	II - 84	25 -100	S. Cebol	9		30	<1	5.8
A	133	II - 85	"	"	14		80	<1	5.8
A	134	II - 86	"	"	12		54	<1	5.8
A	135	II - 87	"	"	7		32	<1	5.6
A	136	II - 88	"	"	24		94	<1	5.6
A	137	II - 89	30 -100	S. Doyot	12		39	<1	6.4
A	138	II - 90	25 - 95	S. Sedate	6		19	<1	5.8
A	139	II - 91	"	"	12		39	<1	5.6
A	140	II - 92	30 - 95	"	9		54	<1	6.0
A	141	II - 93	"	"	10		42	<1	5.8
A	142	II - 97	25 - 90	S. Raya	16		50	<1	6.0
A	143	II - 98	"	"	128		112	<1	5.4
A	144	II - 99	"	"	27		110	<1	5.6
A	145	II -102	"	"	22		101	<1	5.6
A	146	II -103	25 - 95	"	28		102	2	5.6
A	147	II -104	20 - 90	S. Nasan	17		91	<1	5.6
A	148	II -105	"	"	20		64	<1	5.6
A	149	II -106	"	"	19		68	<1	5.6
A	150	II -108	25 - 90	S. Sebulu	15		95	<1	5.6
A	151	II -110	30 - 90	"	22		100	<1	5.6
A	152	II -111	"	"	19		78	<1	5.6
A	153	II -112	25 - 90	S. Sekong	14		31	<1	5.6
A	154	II -113	"	"	20		94	<1	5.2
A	155	II -114	"	S. Sebulu	12		54	<1	5.4
A	156	II -115	"	S. Sekong	17		75	<1	5.8
A	157	II -118	30 - 95	S. Tunek	27		97	<1	5.6
A	158	II -119	"	"	25		122	<1	5.6
A	159	II -120	30 - 90	S. Selayu	16		46	<1	5.6
A	160	II -121	"	"	22		90	<1	5.2

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
A	161	II -122	25 - 90	S. Selayu	17		89	<1	5.6
B	162	III- 3	15 - 85	S. Liu	32		72	<1	6.0
B	163	III- 4	"	"	33		74	<1	6.0
B	164	III- 5	"	"	28		48	1	6.0
A	165	III- 6	"	S. Pesune	33		76	<1	5.0
A	166	III- 7	"	"	37		90	1	6.0
A	167	III- 8	"	"	42		86	<1	6.0
B	168	III- 9	20 - 80	S. Moroi	64		89	1	5.8
B	169	III- 10	"	"	56		98	<1	6.0
B	170	III- 11	"	"	76		108	<1	6.0
B	171	III- 12	"	"	59		106	1	6.0
B	172	III- 13	20 - 85	S. Ketapang	39		98	<1	5.8
B	173	III- 14	"	"	57		120	<1	6.0
A	174	III- 15	"	S. Pesune	32		72	<1	6.0
A	175	III- 16	"	"	48		87	<1	6.0
A	176	III- 17	"	"	33		96	<1	6.0
A	177	III- 18	"	"	23		63	<1	5.6
B	178	III- 19	"	S. Rasau	45		86	<1	5.6
B	179	III- 20	"	S. Semahu	41		113	<1	6.0
A	180	III- 21	"	S. Kelau	29		95	<1	6.0
B	181	III- 22	20 - 80	S. Liu	64		91	1	6.0
A	182	III- 24	20 - 85	S. Raya	28		85	<1	5.8
A	183	III- 25	"	"	9		33	<1	6.0
A	184	III- 26	"	"	21		64	<1	6.0
A	185	III- 27	20 - 90	"	23		68	<1	5.8
A	186	III- 28	20 - 85	"	19		67	<1	5.8
A	187	III- 29	20 - 90	"	16		68	<1	5.6
A	188	III- 30	"	"	25		87	<1	5.8
A	189	III- 31	25 - 90	S. Sekong	18		101	<1	6.0
A	190	III- 32	"	"	24		116	<1	6.0
A	191	III- 33	"	"	23		59	<1	5.8
B	192	III- 34	25 - 85	S. Sebalau	107	54	112	1	5.8

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	193	III- 36	25 - 85	S. Sebalau	292	120	80	1	5.8
B	194	III- 37	"	"	134	48	47	1	5.8
B	195	III- 39	"	S. Tel Nam	22		71	<1	5.8
B	196	III- 40	"	"	52		81	<1	5.8
B	197	III- 41	"	S. Sebalau	40	13	71	1	5.6
B	198	III- 42	"	"	37	10	51	<1	5.8
B	199	III- 43	"	"	41	13	109	1	5.8
B	200	III- 45	"	"	46	14	58	<1	5.6
B	201	III- 47	"	S. Tel Nam	100		79	<1	5.6
B	202	III- 48	"	"	56		64	<1	5.8
B	203	III- 49	"	"	312		40	1	5.8
B	204	III- 50	"	"	105		68	<1	5.6
B	205	III- 51	"	S. Bani	46	16	54	<1	5.8
B	206	III- 52	"	"	83	14	24	<1	5.6
B	207	III- 53	"	"	109	35	30	<1	5.8
B	208	III- 54	25 - 80	"	339	48	38	<1	5.6
B	209	III- 55	"	"	87	15	80	<1	5.4
B	210	III- 56	25 - 85	S. Tel Nam	95	24	42	<1	5.8
B	211	III- 57	"	S. Melunu	13	5	40	<1	5.8
B	212	III- 58	"	"	28	9	76	<1	5.8
B	213	III- 59	"	S. Boni	135	84	183	1	6.0
B	214	III- 60	"	"	129	46	59	<1	5.6
B	215	III- 61	"	"	223	78	84	<1	5.8
B	216	III- 62	"	"	161	46	43	<1	5.8
B	217	III- 65	"	"	76	28	76	<1	5.6
B	218	III- 66	30 - 85	S. Benawan	46		70	<1	5.6
B	219	III- 67	"	"	25		102	<1	5.8
B	220	III- 68	"	"	20		89	<1	6.0
B	221	III- 69	"	"	17		81	2	5.8
B	222	III- 70	"	"	16		110	<1	5.8
B	223	III- 72	"	"	18		122	<1	5.6
B	224	III- 73	"	"	19		88	<1	5.8

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	225	III- 74	30 - 85	S. Benawan	25		90	<1	5.8
B	226	III- 76	"	"	18		79	<1	5.6
B	227	III- 77	"	"	28		75	<1	5.8
B	228	III- 80	"	"	20		61	<1	5.8
A	229	III- 81	"	S. Semuun	34		54	<1	5.6
B	230	III- 82	"	S. Benuang	71		63	<1	5.8
B	231	III- 83	"	"	63		82	<1	5.6
B	232	III- 86	"	"	19		107	<1	5.8
B	233	III- 87	"	"	20		101	<1	5.8
A	234	III- 88	"	S. Berangkai	24		50	<1	5.8
B	235	III- 91	"	"	40		96	<1	5.8
A	236	III- 92	"	S. Benawan	49		45	<1	5.8
B	237	III- 94	"	"	17		27	1	5.6
A	238	III- 95	25 - 85	S. Durian	79		64	<1	5.6
A	239	III- 96	"	"	30		56	<1	5.6
B	240	III- 98	30 - 85	S. Benuang	52		99	<1	5.8
B	241	III- 99	"	"	24		147	<1	5.8
B	242	III-100	"	"	36		118	1	5.8
B	243	III-101	"	"	28		146	<1	5.8
B	244	III-103	"	"	32		131	1	5.8
A	245	III-104	"	S. Berangkai	39		59	<1	5.8
B	246	III-108	"	"	37		217	1	5.8
B	247	III-111	35 - 85	S. Sebintik	42		75	2	5.6
A	248	III-112	15 - 85	S. Semidang	23		95	<1	5.6
A	249	III-113	"	"	15		70	<1	5.8
A	250	III-114	"	"	22		51	1	5.6
A	251	III-115	"	"	52		102	1	5.8
B	252	IV - 1	20 - 75	S. Kempawah	41	8	79	<1	6.0
B	253	IV - 2	"	"	29	8	90	<1	6.4
B	254	IV - 3	"	"	30	10	90	1	6.2
B	255	IV - 4	"	S. Pehen	139		199	1	5.8
B	256	IV - 15	15 - 80	S. Bumbung	33		65	1	6.8

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	257	IV - 16	15 - 80	S. Bumbung	66		127	1	6.2
B	258	IV - 17	20 - 80	"	78		130	2	6.2
B	259	IV - 21	"	"	60		83	1	6.2
B	260	IV - 22	"	"	29		72	<1	7.2
B	261	IV - 26	"	"	84		78	<1	7.2
B	262	IV - 28	"	"	94		104	<1	6.8
B	263	IV - 29	"	"	29		61	<1	6.0
B	264	IV - 30	"	"	73		68	<1	6.8
B	265	IV - 34	"	"	73		117	<1	7.2
B	266	IV - 35	"	"	72		96	<1	7.2
B	267	IV - 36	25 - 75	S. Pehen	22		94	<1	-
B	268	IV - 37	"	"	16		91	<1	-
B	269	IV - 38	"	"	14		106	<1	-
B	270	IV - 39	"	"	32		102	<1	-
B	271	IV - 42	30 - 80	S. Alam	21	8	71	<1	5.8
B	272	IV - 46	25 - 80	S. Jelayan	58	16	108	<1	6.2
B	273	IV - 47	30 - 80	S. Semade	50	18	91	<1	6.2
B	274	IV - 52	"	"	37	12	104	<1	6.2
B	275	IV - 53	"	"	20	8	90	<1	6.4
B	276	IV - 54	"	"	14	4	58	<1	6.2
B	277	IV - 55	"	"	23	8	113	<1	6.6
B	278	IV - 56	"	"	22	8	127	<1	6.4
B	279	IV - 59	"	"	39	12	79	<1	6.2
B	280	IV - 60	"	S. Maha	33	12	90	<1	6.2
B	281	IV - 65	25 - 80	"	22	10	65	<1	6.6
B	282	IV - 66	30 - 80	S. Mala	47	18	104	<1	6.2
B	283	IV - 67	"	"	12	6	52	<1	6.4
B	284	IV - 68	"	S. Laba	38		88	<1	6.4
B	285	IV - 69	"	S. Santung	25		25	<1	6.2
B	286	IV - 70	35 - 80	S. Lolang	41		43	<1	5.8
B	287	IV - 73	"	"	41		54	<1	6.4
B	288	IV - 76	30 - 80	"	339		60	<1	6.2

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	289	IV - 78	35 - 80	S. Sebintik	54		46	<1	6.2
B	290	IV - 80	"	"	93		61	<1	6.4
B	291	IV - 81	"	"	65		121	<1	6.2
B	292	IV - 82	"	"	74		101	<1	6.4
B	293	IV - 83	30 - 80	"	90		98	<1	5.8
B	294	IV - 84	"	"	142		91	<1	6.2
B	295	IV - 87	"	S. Teriak	75		64	<1	6.2
B	296	IV - 90	"	S. Benteng	32		61	<1	6.2
B	297	IV - 92	"	"	36		80	<1	6.2
B	298	IV - 98	"	S. Teriak	47		79	<1	6.4
B	299	IV -100	"	"	79		125	<1	6.4
B	300	IV -102	"	"	104		102	<1	6.2
B	301	IV -104	"	"	64		81	<1	-
B	302	IV -107	35 - 80	S. Sebintik	38		77	<1	6.2
B	303	IV -108	35 - 85	S. Setanga	44		94	<1	6.2
B	304	IV -109	"	"	25		50	<1	6.2
B	305	IV -111	30 - 85	"	23		49	<1	6.4
B	306	IV -112	"	"	13		66	<1	6.4
B	307	IV -113	35 - 80	S. Teriak	37		185	<1	6.2
B	308	IV -114	30 - 80	"	50		52	<1	6.2
B	309	IV -117	"	"	28		57	<1	6.2
B	310	IV -119	"	"	12		55	<1	5.8
B	311	IV -120	"	"	27		47	<1	6.0
B	312	IV -121	"	"	26		48	<1	6.0
B	313	IV -122	"	"	32		63	<1	6.0
B	314	IV -123	20 - 75	S. Mempawah	33	14	41	<1	5.8
B	315	IV -125	25 - 75	"	30	10	65	<1	6.2
B	316	IV -126	25 - 80	"	44	15	74	<1	6.2
B	317	IV -128	"	"	56	22	104	<1	6.2
B	318	IV -129	"	"	45	18	128	<1	6.4
B	319	IV -130	"	"	36	12	83	<1	6.2
B	320	IV -131	"	"	44	8	70	<1	6.2

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	321	IV -133	25 - 80	S. Mempawah	57	13	99	<1	6.2
B	322	IV -134	"	"	114	26	56	<1	6.4
B	323	IV -136	20 - 80	"	42	12	78	<1	6.2
B	324	IV -137	25 - 80	"	126	19	52	<1	6.2
B	325	IV -139	20 - 80	S. Sakung	39	14	61	<1	6.2
B	326	IV -141	"	"	74	20	142	<1	6.4
B	327	IV -143	"	"	52	13	90	<1	6.2
B	328	IV -144	"	"	98	37	93	<1	5.8
B	329	IV -146	20 - 75	S. Mempawah	63	18	94	<1	6.2
B	330	IV -148	"	S. Pehen	24		102	<1	5.8
B	331	IV -150	"	"	41		48	<1	6.0
B	332	IV -151	25 - 75	"	56		78	<1	6.0
B	333	IV -153	"	"	83		86	<1	6.2
B	334	IV -154	"	"	66		80	<1	6.2
B	335	IV -155	"	"	50		76	<1	6.2
B	336	IV -157	"	"	28		73	<1	6.2
B	337	IV -158	"	"	62		90	<1	6.0
B	338	IV -161	25 - 80	S. Menyuke	44	10	87	<1	6.0
B	339	IV -164	"	"	16	4	32	<1	6.0
B	340	IV -165	"	"	16	2	48	<1	6.0
B	341	IV -166	"	"	31	6	49	<1	6.2
B	342	IV -168	"	S. Selimut	30	4	24	<1	6.0
B	343	IV -169	25 - 75	S. Pabuak	17	2	36	<1	6.0
B	344	IV -171	"	S. Selimut	23		54	<1	6.2
B	345	IV -172	25 - 80	S. Menyuke	49	12	72	<1	5.8
B	346	V - 1	25 - 65	S. Sailo	23		47	<1	6.0
B	347	V - 2	25 - 70	S. Tahuban	19		39	<1	6.2
B	348	V - 3	"	"	24		50	<1	6.5
B	349	V - 4	"	"	83		119	<1	6.5
B	350	V - 7	"	"	56		109	<1	6.2
B	351	V - 9	25 - 65	S. Kerasik	30		63	<1	6.0
B	352	V - 10	"	"	52		79	<1	6.0

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	353	V - 11	25 - 65	S. Kerasik	28		74	<1	6.2
B	354	V - 12	25 - 70	"	45		83	<1	6.0
B	355	V - 13	"	"	25		94	1	6.0
B	356	V - 14	"	"	44		55	<1	6.4
B	357	V - 16	"	S. Sallo	41		90	<1	6.8
B	358	V - 17	"	"	108		100	<1	6.8
B	359	V - 18	"	S. Tangga	46		92	<1	6.2
B	360	V - 19	"	"	33		85	<1	6.6
B	361	V - 20	"	S. Tahuban	41		91	<1	7.3
B	362	V - 21	"	"	29		76	<1	6.2
B	363	V - 22	30 - 65	S. Saur	6		11	<1	6.0
B	364	V - 23	"	"	44		97	<1	6.8
B	365	V - 24	25 - 65	"	4		9	<1	6.4
B	366	V - 25	"	"	5		9	<1	6.0
B	367	V - 26	30 - 65	S. Sembuang	15		50	<1	6.4
B	368	V - 29	25 - 65	"	19		51	<1	6.2
B	369	V - 31	30 - 65	"	2		8	<1	6.0
B	370	V - 32	"	"	13		50	<1	6.0
B	371	V - 33	"	S. Beguru	27		67	<1	6.2
B	372	V - 35	"	"	36		72	<1	6.2
B	373	V - 39	30 - 60	S. Sembuang	23		50	<1	6.0
B	374	V - 41	30 - 65	"	19		41	<1	6.0
B	375	V - 42	35 - 65	"	17		36	1	6.2
B	376	V - 43	30 - 70	"	18		31	<1	6.0
B	377	V - 44	"	"	6		27	<1	6.0
B	378	V - 45	35 - 65	"	11		25	<1	6.4
B	379	V - 46	30 - 70	S. Sari	5		12	<1	6.0
B	380	V - 47	"	"	7		10	<1	6.4
B	381	V - 48	30 - 65	"	6		40	<1	6.4
B	382	V - 49	"	"	4		27	<1	6.0
B	383	V - 50	"	"	4		46	<1	6.4
B	384	V - 51	"	"	8		31	<1	6.4

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	385	V - 52	30 - 70	S. Sembuang	19		38	<1	6.2
B	386	V - 53	"	S. Karaban	17		45	<1	6.4
B	387	V - 56	"	"	15		33	<1	6.4
B	388	V - 58	"	S. Minang	18		51	<1	6.4
B	389	V - 59	25 - 75	S. Setona	29		72	<1	6.4
B	390	V - 60	"	"	19		21	<1	6.2
B	391	V - 61	"	"	33		90	1	6.4
B	392	V - 62	30 - 75	"	25		41	1	6.4
B	393	V - 65	"	"	63		94	2	6.2
B	394	V - 66	"	"	34		82	1	6.4
B	395	V - 67	"	"	36		68	<1	6.4
B	396	V - 69	25 - 70	S. Sallo	14		45	<1	6.8
B	397	V - 71	"	"	31		78	1	7.0
B	398	V - 72	"	"	36		85	1	7.2
B	399	V - 73	"	"	37		87	1	7.2
B	400	V - 75	25 - 65	S. Anau	12		37	1	6.8
B	401	V - 76	"	"	24		57	<1	6.8
B	402	V - 79	"	S. Bala	10		27	2	6.4
B	403	V - 81	"	"	41		46	<1	7.0
B	404	V - 82	"	S. Sallo	22		48	<1	6.2
B	405	V - 83	"	"	9		37	<1	5.8
B	406	V - 86	30 - 65	S. Aja	5		20	2	6.2
B	407	V - 90	"	"	15		34	<1	5.8
B	408	V - 91	"	"	20		49	2	6.9
B	409	V - 92	"	"	13		45	<1	5.8
B	410	V - 93	"	"	18		48	<1	6.0
B	411	V - 95	"	"	10		34	<1	6.2
B	412	V - 97	30 - 60	"	31		48	3	6.2
B	413	V - 98	"	"	66		118	2	6.0
B	414	V -102	30 - 65	S. Padup	4		19	1	6.0
B	415	V -103	"	"	10		19	<1	5.8
B	416	V -104	35 - 70	S. Minang	12		56	<1	6.0

Block	Serial No.	Sample No.	Location		Assay Results (P.P.M)				PH
			Grid on map	River or Creek	Cu		Zn	Mo	
					T-Cu	Cx-Cu			
B	417	V -106	30 - 75	S. Menyuke	2		8	<1	5.8
B	418	V -107	"	"	8		11	1	5.6
B	419	V -108	"	S. Setona	10		42	1	5.8
B	420	V -109	30 - 70	S. Janing	14		31	<1	5.8
B	421	V -113	"	"	23		54	<1	5.8
B	422	V -114	"	"	33		58	<1	5.8
B	423	V -115	"	"	26		47	<1	6.0
B	424	V -116	"	S. Karaban	24		56	<1	5.8
B	425	V -119	"	"	34		91	<1	5.8
B	426	V -120	"	S. Minang	16		47	<1	6.0
B	427	V -121	"	"	20		56	<1	6.0
B	428	V -122	25 - 75	S. Kunyit	24		33	<1	6.0
B	429	V -123	"	"	33		59	1	6.0
B	430	V -124	"	"	15		38	<1	6.2
B	431	V -125	"	"	47		87	<1	5.4
B	432	V -126	"	S. Selimut	47	4	67	<1	6.0
B	433	V -127	"	"	47	4	73	<1	6.0
B	434	V -128	30 - 75	S. Menyuke	18		69	<1	6.0
B	435	V -130	"	S. Setona	11		69	<1	6.0

Appendix 9 Number of Gold Grains by Megascopic Observation

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
1	I - 1	15 - 95	S. Rerong				1		1
2	I - 2	"	"			7	6		13
3	I - 3	"	"						-
4	I - 4	10 - 95	S. Mengkaman			10	9	1	20
5	I - 5	"	"						-
6	I - 6	"	"		5				5
7	I - 7	15 - 95	"		1				1
8	I - 8	"	S. Muan Ama		1				1
9	I - 9	"	S. Melabu						-
10	I - 10	"	"						-
11	I - 11	"	"						-
12	I - 12	"	"						-
13	I - 13	"	"						-
14	I - 14	"	"						-
15	I - 15	"	S. Sansak						-
16	I - 16	"	"						-
17	I - 17	"	"						-
18	I - 18	"	"						-
19	I - 19	"	"						-
20	I - 20	"	"						-
21	I - 21	"	"						-
22	I - 22	"	S. Semoa Karuh		1	1			2
23	I - 23	"	"						-
24	I - 24	"	"						-
25	I - 25	"	"						-
26	I - 26	20 - 95	"						-
27	I - 27	15 - 95	S.Semoa Tapang						-
28	I - 28	"	"						-
29	I - 29	"	"						-
30	I - 30	"	"						-
31	I - 31	20 - 95	"						-
32	I - 32	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
33	I - 33	20 - 95	S.Semoa Tapang						-
34	I - 34	15 - 90	S. Reis						-
35	I - 35	10 - 90	S. Raya						-
36	I - 36	15 - 90	S. Mandor						-
37	I - 37	"	"						-
38	I - 38	"	"						-
39	I - 39	10 - 90	"						-
40	I - 40	"	"			3			3
41	I - 41	"	"						-
42	I - 42	"	"						-
43	I - 43	15 - 95	S. Raya			1			1
44	I - 44	15 - 90	S. Semoakaruh						-
45	I - 45	"	S. Buluh		2				2
46	I - 46	"	S. Raya			2			2
47	I - 47	"	S. Sepai						-
48	I - 48	"	S. Raya						-
49	I - 49	"	"						-
50	I - 50	"	"						-
51	I - 51	"	"						-
52	I - 52	"	"						-
53	I - 53	"	"						-
54	I - 54	20 - 90	S. Sepai						-
55	I - 55	15 - 90	"					1	1
56	I - 56	20 - 90	"		10				10
57	I - 57	"	"						-
58	I - 58	"	"						-
59	I - 59	"	"			1			1
60	I - 60	"	"						-
61	I - 61	"	"						-
62	I - 62	"	"					1	1
63	I - 63	20 - 95	"						-
64	I - 64	20 - 90	"		8	3			11

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
65	I - 65	20 - 95	S. Sepai			1			1
66	I - 66	"	"						-
67	I - 67	20 - 90	S. Side						-
68	I - 68	"	S. Sebowak						-
69	I - 69	"	"				1		1
70	I - 70	"	S. Sepai						-
71	I - 71	"	"						-
72	I - 72	"	"				1		1
73	I - 73	"	S. Sebowak		8	2	1		11
74	I - 74	"	"		12	5	1		18
75	I - 75	"	"		7				7
76	I - 76	"	"				1		1
77	I - 77	15 - 90	S. Mau		6	1	1	1	9
78	I - 78	"	"						-
79	I - 79	"	"						-
80	I - 80	"	"						-
81	I - 81	"	"						-
82	I - 82	"	"						-
83	I - 83	"	S. Semidang		9	1			10
84	I - 84	"	S. Mau						-
85	I - 85	"	"		6				6
86	I - 86	"	"						-
87	I - 87	"	"						-
88	I - 88	20 - 90	S. Nasan						-
89	II - 1	25 -100	S. Ledo						-
90	II - 2	"	S. Bamua						-
91	II - 3	20 -100	"						-
92	II - 4	"	"		1				1
93	II - 5	"	"						-
94	II - 6	25 -100	S. Banan		8				8
95	II - 7	20 -100	"		1				1
96	II - 8	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
97	II - 9	20 -100	S. Banan		3				3
98	II - 10	"	"						-
99	II - 11	25 - 95	S. Ledo						-
100	II - 12	"	"		9				9
101	II - 13	"	"		6				6
102	II - 14	"	"		1				1
103	II - 15	"	"						-
104	II - 16	20 - 95	S. Sirih		1				1
105	II - 17	"	S. Ledo		5				5
106	II - 18	25 - 95	"						-
107	II - 19	"	"						-
108	II - 20	"	"						-
109	II - 21	20 -100	S. Bamua						-
110	II - 22	"	"		1				1
111	II - 23	"	"		1				1
112	II - 24	"	"						-
113	II - 25	"	"						-
114	II - 26	"	"		3				3
115	II - 27	20 - 95	"						-
116	II - 28	"	"						-
117	II - 29	"	"						-
118	II - 30	25 -100	S. Ledo		7				7
119	II - 31	"	"		28				28
120	II - 32	"	S. Lumar		9				9
121	II - 33	20 - 95	S. Sirih						-
122	II - 34	"	"						-
123	II - 35	"	"						-
124	II - 36	"	"						-
125	II - 37	"	"						-
126	II - 38	"	"						-
127	II - 39	"	"						-
128	II - 40	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
129	II - 41	20 - 95	S. Sirih						-
130	II - 42	"	"						-
131	II - 43	"	"						-
132	II - 44	"	"						-
133	II - 45	"	"						-
134	II - 46	"	"						-
135	II - 47	"	S. Ledo						-
136	II - 48	"	"						-
137	II - 49	"	"						-
138	II - 50	"	"						-
139	II - 51	"	"						-
140	II - 52	25 - 95	"		2				2
141	II - 53	20 - 95	"						-
142	II - 54	25 - 95	"		1				1
143	II - 55	20 - 95	"		4				4
144	II - 56	25 - 95	"						-
145	II - 57	20 - 95	"		4				4
146	II - 58	"	"						-
147	II - 59	"	"						-
148	II - 60	"	"						-
149	II - 61	"	"						-
150	II - 62	"	"						-
151	II - 63	"	"						-
152	II - 64	25 -100	S. Lunar		15	2			17
153	II - 65	"	"		24	2			26
154	II - 66	"	"		30				30
155	II - 67	"	"		10	4			14
156	II - 68	"	"						-
157	II - 69	"	"		81	1			82
158	II - 70	"	"		68				68
159	II - 71	20 -100	S. Bamua						-
160	II - 72	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
161	II - 73	20 -100	S. Bamua						-
162	II - 74	"	"						-
163	II - 75	"	"						-
164	II - 76	"	S. Banan		26	2			28
165	II - 77	"	"		1				1
166	II - 78	"	"						-
167	II - 79	"	"						-
168	II - 80	"	"						-
169	II - 81	"	"		40	2			42
170	II - 82	"	"		26				26
171	II - 83	"	"						-
172	II - 84	25 -100	S. Cebol		9				9
173	II - 85	"	"		15	16			31
174	II - 86	"	"		11	6			17
175	II - 87	"	"		10	2			12
176	II - 88	"	"		7	1			8
177	II - 89	30 -100	S. Doyot						-
178	II - 90	25 - 95	S. Sedate		1	3			4
179	II - 91	"	"		5				5
180	II - 92	30 - 95	"						-
181	II - 93	"	"		1				1
182	II - 94	"	"						-
183	II - 95	"	S. Dayak		1				1
184	II - 96	25 - 90	S. Raya						-
185	II - 97	"	"		3	1	1		5
186	II - 98	"	"						-
187	II - 99	"	"						-
188	II -100	"	"						-
189	II -101	"	"						-
190	II -102	"	"						-
191	II -103	25 - 95	"						-
192	II -104	20 - 90	S. Nasan		1				1

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
193	II -105	20 - 90	S. Nasan						-
194	II -106	"	"						-
195	II -107	"	"						-
196	II -108	25 - 90	S. Sebulu		6	1			7
197	II -109	"	"		2				2
198	II -110	30 - 90	"						-
199	II -111	"	"						-
200	II -112	25 - 90	S. Sekong		1				1
201	II -113	"	"						-
202	II -114	"	S. Sebulu						-
203	II -115	"	S. Sekong						-
204	II -116	30 - 90	"						-
205	II -117	30 - 95	S. Tunek						-
206	II -118	"	"						-
207	II -119	"	"						-
208	II -120	30 - 90	S. Selayu		12				12
209	II -121	"	"		4	2			6
210	II -122	25 - 90	"		2				2
211	II -123	25 -100	S. Lumar		16				16
212	II -124	"	"		56	6			62
213	III- 1	15 - 85	S. Semidang	4					4
214	III- 2	"	S. Liu						-
215	III- 3	"	"						-
216	III- 4	"	"						-
217	III- 5	"	"						-
218	III- 6	"	S. Pesune		12	8	1		21
219	III- 7	"	"			2			2
220	III- 8	"	"						-
221	III- 9	20 - 80	S. Morot		14				14
222	III- 10	"	"		4				4
223	III- 11	"	"						-
224	III- 12	"	"		8				8

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
225	III- 13	20 - 85	S. Ketapang						-
226	III- 14	"	"		4				4
227	III- 15	"	S. Pesune		3				3
228	III- 16	"	"						-
229	III- 17	"	"		>20	8			>28
230	III- 18	"	"		8	2			10
231	III- 19	"	S. Rasau	12					12
232	III- 20	"	S. Semahu						-
233	III- 21	"	S. Kelau						-
234	III- 22	20 - 80	S. Liu						-
235	III- 23	20 - 85	S. Pesune		8	1			9
236	III- 24	"	S. Raya						-
237	III- 25	"	"						-
238	III- 26	"	"		6				6
239	III- 27	20 - 90	"		3				3
240	III- 28	20 - 85	"						-
241	III- 29	20 - 90	"						-
242	III- 30	"	"		2				2
243	III- 31	25 - 90	S. Sekong						-
244	III- 32	"	"						-
245	III- 33	"	"						-
246	III- 34	25 - 85	S. Sebalau	4					4
247	III- 35	"	"	20					20
248	III- 36	"	"		4				4
249	III- 37	"	"		15	2			17
250	III- 38	"	"		8				8
251	III- 39	"	S. Tei Nan						-
252	III- 40	"	"		2				2
253	III- 41	"	S. Sebalau		25				25
254	III- 42	"	"		6	6	1		13
255	III- 43	"	"		3				3
256	III- 44	"	"		5	2			7

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
257	III- 45	25 - 85	S. Sebalau		9				9
258	III- 46	"	"		16	3			19
259	III- 47	"	S. Tel Nam						-
260	III- 48	"	"		3				3
261	III- 49	"	"		1				1
262	III- 50	"	"		5				5
263	III- 51	"	S. Boni		3	1			4
264	III- 52	"	"		2	1			3
265	III- 53	"	"		7				7
266	III- 54	25 - 80	"		10				10
267	III- 55	"	"		4				4
268	III- 56	25 - 85	S. Tel Nam	18	3				21
269	III- 57	"	S. Melunu						-
270	III- 58	"	"		13				13
271	III- 59	"	S. Boni		8				8
272	III- 60	"	"		6				6
273	III- 61	"	"		2				2
274	III- 62	"	"		1				1
275	III- 63	"	"		3				3
276	III- 64	"	"		1				1
277	III- 65	"	"						-
278	III- 66	30 - 85	S. Benawan						-
279	III- 67	"	"						-
280	III- 68	"	"						-
281	III- 69	"	"						-
282	III- 70	"	"						-
283	III- 71	"	"						-
284	III- 72	"	"						-
285	III- 73	"	"		2				2
286	III- 74	"	"						-
287	III- 75	"	"		2				2
288	III- 76	"	"		2				2

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
289	III- 77	30 - 85	S. Benawan		6		1		7
290	III- 78	"	"						-
291	III- 79	"	"		2				2
292	III- 80	"	"						-
293	III- 81	"	S. Semuun						-
294	III- 82	"	S. Benuang						-
295	III- 83	"	"						-
296	III- 84	"	"		4	2			6
297	III- 85	"	"		3	1			4
298	III- 86	"	"		2				2
299	III- 87	"	"		6				6
300	III- 88	"	S. Berangkai		15				15
301	III- 89	"	"		3				3
302	III- 90	"	"		2				2
303	III- 91	"	"		1				1
304	III- 92	"	S. Benawan		3				3
305	III- 93	"	"		1				1
306	III- 94	"	"		1				1
307	III- 95	25 - 85	S. Durian						-
308	III- 96	"	"		2				2
309	III- 97	30 - 85	S. Benuang		9	1			10
310	III- 98	"	"	11	1				12
311	III- 99	"	"						-
312	III-100	"	"		2				2
313	III-101	"	"		1				1
314	III-102	"	"		2				2
315	III-103	"	"						-
316	III-104	"	S. Berangkai		1				1
317	III-105	"	"						-
318	III-106	"	"		1				1
319	III-107	"	"						-
320	III-108	"	"		1				1

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
321	III-109	30 - 85	S. Berangkai		6				6
322	III-110	35 - 85	S. Sebintik						-
323	III-111	"	"						-
324	III-112	15 - 85	S. Semidang		4				4
325	III-113	"	"	6					6
326	III-114	"	"		2				2
327	III-115	"	"						-
328	IV - 1	20 - 75	S. Nempawah		5				5
329	IV - 2	"	"		2				2
330	IV - 3	"	"		3				3
331	IV - 4	"	S. Pehen						-
332	IV - 5	15 - 80	S. Bumbung						-
333	IV - 6	"	"						-
334	IV - 7	"	"						-
335	IV - 8	"	"						-
336	IV - 9	"	"						-
337	IV - 10	"	"						-
338	IV - 11	"	"						-
339	IV - 12	"	"						-
340	IV - 13	"	"						-
341	IV - 14	"	"						-
342	IV - 15	"	"		2				2
343	IV - 16	"	"						-
344	IV - 17	20 - 80	"						-
345	IV - 18	15 - 80	"						-
346	IV - 19	"	"		1				1
347	IV - 20	20 - 80	"						-
348	IV - 21	"	"						-
349	IV - 22	"	"						-
350	IV - 23	"	"						-
351	IV - 24	"	"						-
352	IV - 25	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
353	IV - 26	20 - 80	S. Bumbung						-
354	IV - 27	"	"						-
355	IV - 28	"	"						-
356	IV - 29	"	"						-
357	IV - 30	"	"						-
358	IV - 31	"	"						-
359	IV - 32	"	"						-
360	IV - 33	"	"						-
361	IV - 34	"	"						-
362	IV - 35	"	"						-
363	IV - 36	25 - 75	S. Pehen						-
364	IV - 37	"	"						-
365	IV - 38	"	"						-
366	IV - 39	"	"						-
367	IV - 40	30 - 80	S. Alam						-
368	IV - 41	"	"						-
369	IV - 42	"	"						-
370	IV - 43	"	S. Semade		2	1	7		10
371	IV - 44	"	S. Jelayan		4	1			5
372	IV - 45	25 - 80	"		2				2
373	IV - 46	"	"						-
374	IV - 47	30 - 80	S. Semade		5				5
375	IV - 48	"	"		1	3			4
376	IV - 49	"	"		7				7
377	IV - 50	"	S. Maha						-
378	IV - 51	"	S. Semade						-
379	IV - 52	"	"		2				2
380	IV - 53	"	"						-
381	IV - 54	"	"		9	4			13
382	IV - 55	"	"		30	2	1		33
383	IV - 56	"	"		1	1			2
384	IV - 57	"	"		40	3	1		44

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
385	IV - 58	30 - 80	S. Semade		4				4
386	IV - 59	"	"		1				1
387	IV - 60	"	S. Maha		4				4
388	IV - 61	"	"		3				3
389	IV - 62	"	"		3	2			5
390	IV - 63	25 - 80	"		13	1			14
391	IV - 64	"	"		65				65
392	IV - 65	"	"		2				2
393	IV - 66	30 - 80	S. Mala		4	1			5
394	IV - 67	"	"		4				4
395	IV - 68	"	S. Laba		1				1
396	IV - 69	"	S. Santung		11				11
397	IV - 70	35 - 80	S. Lolang						-
398	IV - 71	"	"						-
399	IV - 72	"	"						-
400	IV - 73	"	"						-
401	IV - 74	"	"						-
402	IV - 75	30 - 80	"						-
403	IV - 76	"	"						-
404	IV - 77	"	"						-
405	IV - 78	35 - 80	S. Sebintik		1				1
406	IV - 79	"	"						-
407	IV - 80	"	"						-
408	IV - 81	"	"						-
409	IV - 82	"	"						-
410	IV - 83	30 - 80	"						-
411	IV - 84	"	"		2				2
412	IV - 85	"	"		1				1
413	IV - 86	"	S. Teriak						-
414	IV - 87	"	"						-
415	IV - 88	"	"						-
416	IV - 89	"	S. Benteng						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
417	IV - 90	30 - 80	S. Benteng						-
418	IV - 91	"	"						-
419	IV - 92	"	"						-
420	IV - 93	"	"						-
421	IV - 94	"	"						-
422	IV - 95	"	"						-
423	IV - 96	"	"						-
424	IV - 98	"	S. Teriak						-
425	IV - 99	"	"						-
426	IV -100	"	"						-
427	IV -101	"	"						-
428	IV -102	"	"						-
429	IV -103	"	"						-
430	IV -104	"	"						-
431	IV -105	35 - 80	S. Sebintik		3				3
432	IV -106	"	"						-
433	IV -107	"	"				1		1
434	IV -108	35 - 85	S. Setanga				1		1
435	IV -109	"	"			1			1
436	IV -110	"	"				2		2
437	IV -111	30 - 85	"						-
438	IV -112	"	"				1		1
439	IV -113	35 - 80	S. Teriak						-
440	IV -114	30 - 80	"			1			1
441	IV -115	"	"						-
442	IV -116	"	"			1			1
443	IV -117	"	"						-
444	IV -118	"	"		2				2
445	IV -119	"	"		4				4
446	IV -120	"	"						-
447	IV -121	"	"						-
448	IV -122	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
449	IV -123	20 - 75	S. Kempawah						20
450	IV -124	"	"						10
451	IV -125	25 - 75	"						4
452	IV -126	25 - 80	"						1
453	IV -127	"	"						4
454	IV -128	"	"						1
455	IV -129	"	"						-
456	IV -130	"	"						6
457	IV -131	"	"						3
458	IV -132	"	"						2
459	IV -133	"	"						70
460	IV -134	"	"						-
461	IV -135	20 - 80	"						-
462	IV -136	"	"						-
463	IV -137	25 - 80	"						-
464	IV -138	20 - 75	S. Sakung						8
465	IV -139	20 - 80	"						3
466	IV -140	"	"						-
467	IV -141	"	"						1
468	IV -142	"	"						5
469	IV -143	"	"						-
470	IV -144	"	"						1
471	IV -145	20 - 75	S. Kempawah						-
472	IV -146	"	"						1
473	IV -147	"	S. Pehen						5
474	IV -148	"	"						-
475	IV -149	"	"						2
476	IV -150	"	"						1
477	IV -151	25 - 75	"						3
478	IV -152	"	"						1
479	IV -153	"	"						1
480	IV -154	"	"						3

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
481	IV -155	25 - 75	S. Pehen						1
482	IV -156	"	"						-
483	IV -157	"	"						-
484	IV -158	"	"						-
485	IV -159	"	"						-
486	IV -160	30 - 80	S. Menyuke						-
487	IV -161	25 - 80	"						1
488	IV -162	"	"						-
489	IV -163	"	"						-
490	IV -164	"	"						-
491	IV -165	"	"						-
492	IV -166	"	"						-
493	IV -167	"	"						-
494	IV -168	"	S. Selimut						-
495	IV -169	25 - 75	"						-
496	IV -170	"	"						1
497	IV -171	"	"						-
498	IV -172	25 - 80	S. Menyuke						-
499	V - 1	25 - 65	S. Sailo						-
500	V - 2	25 - 70	S. Tahuban		7				7
501	V - 3	"	"						-
502	V - 4	"	"						-
503	V - 5	"	"						-
504	V - 6	"	"						-
505	V - 7	"	"						-
506	V - 8	"	"						-
507	V - 9	25 - 65	S. Kerasik						-
508	V - 10	"	"						-
509	V - 11	25 - 70	"						-
510	V - 12	"	"						-
511	V - 13	"	"						-
512	V - 14	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
513	V - 15	25 - 70	S. Saflo						-
514	V - 16	"	"						-
515	V - 17	"	"						-
516	V - 18	"	"						-
517	V - 19	"	"						-
518	V - 20	"	S. Tahuban						-
519	V - 21	"	"						-
520	V - 22	30 - 65	S. Saur						-
521	V - 23	"	"						-
522	V - 24	25 - 65	"						-
523	V - 25	"	"						-
524	V - 26	30 - 65	S. Sembuang						-
525	V - 27	"	"						-
526	V - 28	"	"						-
527	V - 29	25 - 65	"						-
528	V - 30	30 - 65	"						-
529	V - 31	"	"						-
530	V - 32	"	"						-
531	V - 33	"	S. Beguru						-
532	V - 34	"	"						-
533	V - 35	"	"						-
534	V - 36	30 - 60	"						-
535	V - 37	"	"						-
336	V - 38	30 - 65	S. Sembuang						-
337	V - 39	30 - 60	"						-
338	V - 40	30 - 65	"						-
339	V - 41	"	"						-
540	V - 42	"	"						-
541	V - 43	30 - 70	"						-
542	V - 44	"	"						-
543	V - 45	30 - 65	"						-
544	V - 46	30 - 70	S. Sari						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
545	V - 47	30 - 70	S. Sari		1				1
546	V - 48	30 - 65	"						-
547	V - 49	"	"		4				4
548	V - 50	"	"		2				2
549	V - 51	"	"						-
550	V - 52	30 - 70	S. Sembuang						-
551	V - 53	"	S. Karaban						-
552	V - 54	"	"						-
553	V - 55	"	"						-
554	V - 56	"	"						-
555	V - 57	"	S. Minang						-
556	V - 58	"	"		2		1		3
557	V - 59	25 - 75	S. Setona		6	3	1		10
558	V - 60	"	"		4				4
559	V - 61	"	"		2				2
560	V - 62	30 - 75	"		1				1
561	V - 63	"	"		1				1
562	V - 64	"	"						-
563	V - 65	"	"						-
564	V - 66	"	"						-
565	V - 67	"	"						-
566	V - 68	25 - 70	S. Sallo		1	1			2
567	V - 69	"	"		1				1
568	V - 70	"	"						-
569	V - 71	"	"						-
570	V - 72	"	"						-
571	V - 73	"	"						-
572	V - 74	25 - 65	S. Anau		1				1
573	V - 75	"	"						-
574	V - 76	"	"			1			1
575	V - 77	"	"		8				8
576	V - 78	"	S. Sallo		1				1

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
577	V - 79	25 - 65	S. Bala						-
578	V - 80	"	"	3					3
579	V - 81	"	"						-
580	V - 82	"	S. Sallo		3				3
581	V - 83	"	"						-
582	V - 84	"	"						-
583	V - 85	30 - 65	S. Aja						-
584	V - 86	"	"						-
585	V - 87	"	"						-
586	V - 88	"	"						-
587	V - 89	"	"						-
588	V - 90	"	"						-
589	V - 91	"	"						-
590	V - 92	"	"						-
591	V - 93	"	"						-
592	V - 94	"	"						-
593	V - 95	"	"						-
594	V - 96	"	"	3					3
595	V - 97	30 - 60	"						-
596	V - 98	"	"						-
597	V - 99	"	"						-
598	V -100	"	"						-
599	V -101	"	"						-
600	V -102	30 - 65	S. Padup	1					1
601	V -103	"	"						-
602	V -104	40 - 70	S. Hinang	9					9
603	V -105	40 - 75	S. Menyuke						-
604	V -106	30 - 75	"			1			1
605	V -107	"	"	3					3
606	V -108	"	S. Setona						-
607	V -109	30 - 70	S. Janing						-
608	V -110	"	"						-

Serial No.	Sample No.	Location		Number of gold grain					
		Grid on map	River or Creek	V.F.C	F.C	M.C	C.C	V.C.C	Total
609	V -111	30 - 70	S. Janing						-
610	V -112	"	"		1	1			2
611	V -113	"	"						-
612	V -114	"	"						-
613	V -115	"	"						-
614	V -116	"	S. Karaban		2				2
615	V -117	"	"						-
616	V -118	"	"						-
617	V -119	"	"						-
618	V -120	"	S. Hinang					2	2
619	V -121	"	"						-
620	V -122	25 - 75	S. Kunyit		4	1			5
621	V -123	"	"						-
622	V -124	"	"						-
623	V -125	"	"		1	1			2
624	V -126	"	S. Selimut			8			8
625	V -127	"	"		11				11
626	V -128	30 - 75	S. Menyuke	9					9
627	V -129	"	S. Setona						-
628	V -130	"	"						-
629	II-120/2	30 - 90	S. Selayu			101	11		112

Appendix 10 Radioactive Readings

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
1	I - 1	15 - 95	S. Melabu	3	1	
2	I - 2	"	"	5	4	
3	I - 3	15 -100	"	7	6	
4	I - 4	"	"	6	5	
5	I - 5	15 - 95	S. Sansak	6	5	
6	I - 6	"	"	6	5	
7	I - 7	"	S. Semoa Karuh	8	5	
8	I - 8	"	S. Semoa Tapang	2	1	
9	I - 9	"	S. Sansak	3	2	
10	I - 10	"	S. Semoa Karuh	1	1	
11	I - 11	20 - 95	"	1	1	
12	I - 12	15 - 95	S. Semoa Tapang	4	3	
13	I - 13	"	"	4	3	
14	I - 14	15 - 90	S. Buluh	3	3	
15	I - 15	"	S. Sepai	3	3	
16	I - 16	"	"	5	3	
17	I - 17	20 - 90	"	4	3	
18	I - 18	20 - 95	"	6	4	
19	I - 19	"	"	4	4	
20	I - 20	20 - 90	S. Side	4	3	
21	I - 21	"	"	6	4	
22	I - 22	"	"	6	5	
23	I - 23	15 - 90	S. Mau	5	3	
24	I - 24	"	"	6	5	
25	I - 25	"	"	6	5	
26	I - 26	"	"	7	6	
27	II - 1	25 -100	S. Ledo	6	5	
28	II - 2	"	S. Banua	6	5	
29	II - 3	"	"	6	5	
30	II - 4	20 -100	"	8	6	
31	II - 5	"	"	6	5	
32	II - 6	"	"	6	5	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
33	II - 7	20 -100	S. Banua	5	4	
34	II - 8	"	"	7	5	
35	II - 9	"	"	7	5	
36	II - 10	"	"	10	5	
37	II - 11	25 -100	S. Banan	6	4	
38	II - 12	"	"	5	4	
39	II - 13	20 -100	"	6	4	
40	II - 14	"	"	4	4	
41	II - 15	"	"	4	3	
42	II - 16	"	"	2	2	
43	II - 17	"	"	4	2	
44	II - 18	25 - 95	S. Ledo	15	5	
45	II - 19	"	"	7	6	
46	II - 20	"	"	7	5	
47	II - 21	"	"	7	5	
48	II - 22	"	"	10	7	
49	II - 23	"	"	10	7	
50	II - 24	20 -100	S. Banua	12	5	
51	II - 25	"	"	10	5	
52	II - 26	"	"	6	6	
53	II - 27	"	"	10	5	
54	II - 28	"	"	12	7	
55	II - 29	"	"	12	7	
56	II - 30	"	"	9	5	
57	II - 31	"	"	10	7	
58	II - 32	20 - 95	"	7	6	
59	II - 33	"	"	11	5	
60	II - 34	"	"	12	7	
61	II - 35	20 -100	"	11	7	
62	II - 36	"	"	39	11	
63	II - 37	20 - 95	"	8	7	
64	II - 38	"	"	13	9	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
65	II - 39	20 - 95	S. Banua	12	9	
66	II - 40	"	"	14	9	
67	II - 41	25 -100	S. Ledo	6	5	
68	II - 42	"	"	10	4	
69	II - 43	"	S. Lunar	5	5	
70	II - 44	30 - 90	S. Sebalau	12	7	
71	II - 45	20 - 95	S. Sirih	10	5	
72	II - 46	"	"	12	5	
73	II - 47	"	"	10	6	
74	II - 48	"	"	11	5	
75	II - 49	"	"	11	5	
76	II - 50	"	"	7	5	
77	II - 51	"	"	14	6	
78	II - 52	"	"	12	5	
79	II - 53	"	"	10	6	
80	II - 54	"	"	12	5	
81	II - 55	"	"	12	6	
82	II - 56	"	"	10	7	
83	II - 57	"	"	6	5	
84	II - 58	20 - 95	S. Ledo	5	2	
85	II - 59	"	"	6	5	
86	II - 60	25 -100	S. Lunar	5	2	
87	II - 61	20 -100	S. Banan	4	4	
88	II - 62	"	"	4	2	
89	II - 63	"	"	4	2	
90	II - 64	"	"	4	2	
91	II - 65	"	"	5	2	
92	II - 66	25 -100	S. Cebol	7	2	
93	II - 67	"	"	7	2	
94	II - 68	25 - 95	S. Sedate	5	3	
95	II - 69	"	"	7	5	
96	II - 70	"	"	7	5	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
97	III- 1	15 - 85	S. Mau	20	10	
98	III- 2	"	S. Liu	10	10	
99	III- 3	"	S. Pesune	10	10	
100	III- 4	"	S. Liu	5	5	
101	III- 5	20 - 85	S. Rasau	1	1	
102	III- 6	"	S. Moroi	2	2	
103	III- 7	"	S. Ketapang	20	20	
104	III- 8	"	S. Kelau	5	5	
105	III- 9	25 - 90	Seburuk	10	10	
106	III- 10	"	S. Sekong	5	5	
107	III- 11	30 - 90	S. Sebalau	9	6	
108	III- 12	25 - 85	"	3	2	
109	III- 13	30 - 85	"	4	4	
110	III- 14	25 - 85	"	6	6	
111	III- 15	"	"	6	6	
112	III- 16	"	"	6	6	
113	III- 17	"	S. Tel Nam	5	3	
114	III- 18	"	"	3	3	
115	III- 19	"	"	3	3	
116	III- 20	"	"	4	3	
117	III- 21	"	S. Boni	8	5	
118	III- 22	"	"	8	6	
119	III- 23	"	"	8	6	
120	III- 24	"	"	8	5	
121	III- 25	25 - 80	"	8	6	
122	III- 26	25 - 85	"	10	8	
123	III- 27	"	S. Melunu	8	6	
124	III- 28	30 - 85	S. Benawan	10	6	
125	III- 29	"	"	6	5	
126	III- 30	30 - 80	"	9	5	
127	III- 31	30 - 85	"	10	8	
128	III- 32	"	"	9	7	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
129	III- 33	35 - 85	Pelahi	10	8	
130	III- 34	25 - 90	S. Sekong	11	10	
131	III- 35	25 - 85	S. Durian	5	4	
132	III- 36	"	S. Boni	7	6	
133	IV - 1	20 - 75	S. Mempawah	3	1	
134	IV - 2	"	"	8	4	
135	IV - 3	"	"	5	3	
136	IV - 4	15 - 80	S. Bumbung	5	3	
137	IV - 5	"	"	2	3	
138	IV - 6	"	"	4	3	
139	IV - 7	"	"	2	1	
140	IV - 8	"	"	5	3	
141	IV - 9	30 - 80	S. Semade	5	4	
142	IV - 10	25 - 80	"	4	2	
143	IV - 11	30 - 80	"	7	5	
144	IV - 12	"	"	4	2	
145	IV - 13	"	"	5	4	
146	IV - 14	"	"	4	3	
147	IV - 15	"	"	6	4	
148	IV - 16	"	S. Benteng	5	4	
149	IV - 17	"	S. Semade	4	3	
150	IV - 18	"	"	5	4	
151	IV - 19	"	"	5	3	
152	IV - 20	"	S. Maha	7	5	
153	IV - 21	"	"	5	4	
154	IV - 22	"	"	4	3	
155	IV - 23	25 - 80	"	4	3	
156	IV - 24	"	"	3	2	
157	IV - 25	35 - 80	S. Lolang	5	3	
158	IV - 26	30 - 80	"	6	5	
159	IV - 27	"	"	6	4	
160	IV - 28	"	S. Sebintik	4	3	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
161	IV - 29	30 - 80	S. Sebintik	5	4	
162	IV - 30	35 - 80	S. Teriak	2	2	
163	IV - 31	30 - 80	"	1	1	
164	IV - 39	"	"	3	3	
165	IV - 40	"	"	4	3	
166	IV - 41	"	S. Benteng	4	3	
167	IV - 42	"	"	4	4	
168	IV - 43	"	"	3	2	
169	IV - 44	"	"	3	2	
170	IV - 45	"	"	3	2	
171	IV - 46	"	"	6	5	
172	IV - 47	"	"	5	4	
173	IV - 48	"	"	4	3	
174	IV - 49	"	S. Teriak	3	2	
175	IV - 50	"	"	4	3	
176	IV - 51	"	"	3	3	
177	IV - 52	"	"	4	3	
178	IV - 53	"	"	4	3	
179	IV - 54	"	"	4	4	
180	IV - 55	"	"	3	2	
181	IV - 56	"	"	3	2	
182	IV - 57	"	"	3	2	
183	IV - 58	"	"	3	2	
184	IV - 59	35 - 80	S. Sebinitik	2	1	
185	IV - 60	35 - 85	"	2	1	
186	IV - 61	"	S. Setanga	2	1	
187	IV - 62	"	"	2	2	
188	IV - 63	"	"	2	2	
189	IV - 64	"	"	2	2	
190	IV - 65	30 - 85	"	2	2	
191	IV - 66	35 - 85	"	3	2	
192	IV - 67	"	"	3	2	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
193	IV - 68	35 - 85	S. Setanga	3	2	
194	IV - 69	"	"	3	2	
195	IV - 70	"	"	2	2	
196	IV - 71	20 - 75	S. Kempawah	4	2	
197	IV - 72	"	"	3	2	
198	IV - 73	"	"	7	5	
199	IV - 74	25 - 75	"	5	3	
200	IV - 75	"	"	4	4	
201	IV - 76	"	"	8	6	
202	IV - 77	"	"	8	5	
203	IV - 78	"	"	6	5	
204	IV - 79	25 - 80	"	5	4	
205	IV - 80	"	"	7	5	
206	IV - 81	"	"	7	7	
207	IV - 82	"	"	6	5	
208	IV - 83	"	"	6	5	
209	IV - 84	"	"	8	5	
210	IV - 85	"	"	8	6	
211	IV - 86	"	"	7	5	
212	IV - 87	"	"	6	5	
213	IV - 88	"	"	6	5	
214	IV - 89	"	"	4	3	
215	IV - 90	"	"	6	5	
216	IV - 91	"	"	4	2	
217	IV - 92	"	"	4	3	
218	IV - 93	"	"	5	4	
219	IV - 94	"	"	4	3	
220	IV - 95	"	"	5	4	
221	IV - 96	"	"	2	2	
222	IV - 97	"	"	3	3	
223	IV - 98	20 - 80	"	3	2	
224	IV - 99	20 - 75	S. Sakung	7	4	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
225	IV -100	20 - 75	S. Sakung	7	5	
226	IV -101	20 - 80	"	6	5	
227	IV -102	"	"	4	3	
228	IV -103	"	"	5	4	
229	IV -104	"	"	6	5	
230	IV -105	"	"	6	5	
231	IV -106	20 - 75	S. Pehen	9	6	
232	IV -107	"	"	2	2	
233	IV -108	"	"	9	7	
234	IV -109	"	"	3	2	
235	IV -110	25 - 75	"	2	2	
236	IV -111	"	"	2	1	
237	IV -112	"	"	2	2	
238	IV -113	"	"	4	3	
239	IV -114	"	"	3	2	
240	IV -115	"	"	4	3	
241	IV -116	"	"	4	4	
242	IV -117	20 - 75	"	2	2	
243	V - 1	25 - 65	S. Sailo	5	4	
244	V - 2	"	"	3	3	
245	V - 3	"	S. Tahuban	7	5	
246	V - 4	25 - 70	"	4	3	
247	V - 5	"	"	8	7	
248	V - 6	"	"	7	5	
249	V - 7	25 - 65	S. Kerasik	8	6	
250	V - 8	"	"	1	1	
251	V - 9	"	"	1	1	
252	V - 10	"	"	1	1	
253	V - 11	25 - 70	S. Sailo	5	3	
254	V - 12	"	"	6	5	
255	V - 13	"	"	8	6	
256	V - 14	"	"	8	5	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
257	V - 15	25 - 70	S. Sailo	7	5	
258	V - 16	"	S. Tahuban	7	11	
259	V - 17	"	"	9	8	
260	V - 18	"	"	8	7	
261	V - 19	"	"	9	5	
262	V - 20	"	"	6	5	
263	V - 21	30 - 65	S. Saur	5	3	
264	V - 22	"	"	4	3	
265	V - 23	"	S. Sembuang	3	3	
266	V - 24	"	"	7	5	
267	V - 25	"	"	9	5	
268	V - 26	25 - 65	"	9	5	
269	V - 27	30 - 65	"	5	4	
270	V - 28	"	"	6	5	
271	V - 29	"	"	8	5	
272	V - 30	"	"	3	3	
273	V - 31	"	S. Beguru	9	5	
274	V - 32	30 - 60	"	8	5	
275	V - 33	30 - 65	S. Sembuang	8	5	
276	V - 34	"	"	5	4	
277	V - 35	"	"	8	5	
278	V - 36	30 - 60	"	7	7	
279	V - 37	30 - 65	"	5	3	
280	V - 38	30 - 70	"	6	4	
281	V - 39	"	"	4	3	
282	V - 40	"	"	5	4	
283	V - 41	35 - 70	"	7	4	
284	V - 42	"	S. Sari	3	3	
285	V - 43	30 - 65	"	3	3	
286	V - 44	"	"	6	3	
287	V - 45	"	"	6	4	
288	V - 46	30 - 70	S. Karaban	3	2	

Serial No.	Sample No.	Location		Measurement Value(μR/h)	Background Value(μR/h)	Remarks
		Grid on map	River or Creek			
289	V - 47	30 - 70	S. Karaban	3	2	
290	V - 48	"	"	5	3	
291	V - 49	"	"	6	4	
292	V - 50	"	"	5	3	
293	V - 51	"	S. Minang	6	3	
294	V - 52	"	"	5	3	
295	V - 53	"	"	3	3	
296	V - 54	"	"	3	3	
297	V - 55	25 - 75	S. Setona	3	3	
298	V - 56	"	"	5	4	
299	V - 57	"	"	4	3	
300	V - 58	"	"	8	5	
301	V - 59	30 - 75	"	5	4	
302	V - 60	"	S. Selimut	3	2	
303	V - 61	25 - 75	"	5	3	
304	V - 62	"	"	7	5	
305	V - 63	"	"	4	3	
306	V - 64	"	"	5	3	
307	V - 65	"	"	10	5	
308	V - 66	"	"	8	5	
309	V - 67	"	"	8	5	
310	V - 68	30 - 75	S. Menyuke	5	4	
311	V - 69	"	S. Setona	3	3	
312	V - 70	"	"	8	5	
313	V - 71	"	"	3	3	
314	V - 72	"	"	6	3	
315	V - 73	"	"	6	3	
316	V - 74	"	"	4	3	
317	V - 75	"	"	3	3	
318	V - 76	"	"	6	2	
319	V - 77	"	"	5	2	