













Appendix 4

List of pan concentrate sample  
in Kinabalu area





Ser. No.	Sample No.	Coordinates		Topographic Map Sheet	Name of Stream	Weight (g)	Order	Width (m)	Flow *1	Size *2
		N	E							
1	U539	1614.20	4626.30	Surob	S. Pandasan	< 1	3	7.0	3	2
2	H520	1609.45	4625.00	Surob	S. Tampado	< 1	3	4.0	1	3
3	R512	1607.65	4625.35	Surob	S. Bugan	< 1	4	4.0	1	2
4	H519	1605.75	4622.30	Surob	S. Templuki	1	3	3.0	2	2
5	U546	1601.65	4624.50	Surob	S. Surob	< 1	3	7.0	2	1
6	S519	1598.45	4629.65	Surob	S. Surob	1	3	2.0	2	2
7	S522	1597.60	4622.00	Surob	S. Rumoloh	2	4	4.0	3	2
8	U540	1596.55	4621.50	Surob	S. Wariu	1	4	25.0	4	2
9	U538	1617.90	4638.10	Surob	S. Sungei	< 1	3	10.0	3	2
10	U525	1609.20	4639.30	Surob	S. Terantidan	< 1	3	5.0	3	2
11	P533	1608.95	4639.30	Surob	S. Bandau	1	4	7.0	3	1
12	S520	1595.80	4630.30	Surob	S. Rumoloh	4	3	4.0	3	2
13	S521	1595.50	4630.25	Surob	S. Rumoloh	2	3	5.0	3	2
14	U558	1594.00	4637.95	Surob	S. Kinaram	11	4	12.0	3	2
15	H514	1612.00	4648.95	Surob	S. Tuaran	2	4	5.0	2	2
16	P516	1601.20	4641.50	Surob	S. Tuaran	< 1	4	7.0	3	1
17	U517	1601.70	4648.85	Surob	S. Kinaram	3	4	20.0	2	2
18	G510	1595.15	4644.10	Surob	S. Serensing	2	3	8.0	3	2
19	R513	1588.60	4626.30	Kinabalu	S. Warlu	37	3	10.0	3	2
20	S525	1587.90	4626.10	Kinabalu	S. Warlu	1	3	5.0	3	2
21	S523	1585.95	4628.15	Kinabalu	S. Warlu	3	3	7.0	3	3
22	S524	1586.00	4628.30	Kinabalu	S. Warlu	< 1	3	6.0	3	3
23	U544	1578.90	4621.70	Kinabalu	S. Libang	1	4	12.0	3	2
24	S526	1577.60	4621.65	Kinabalu	S. Penataran	18	3	4.5	4	2
25	T518	1566.30	4621.60	Kinabalu	S. Kadamaran	2	4	5.5	4	1
26	D550	1563.15	4631.95	Kinabalu	S. Mesilau	6	4	8.0	3	2
27	T521	1562.80	4636.90	Kinabalu	S. Berembang	39	3	4.0	4	1
28	N642	1576.90	4640.40	Kinabalu	S. Kinapassan	1	4	6.0	4	1
29	N643	1576.85	4640.40	Kinabalu	S. Kinapassan	< 1	3	4.0	4	1
30	J516	1574.59	4646.00	Kinabalu	S. Nalumad	22	4	7.0	4	1
31	D517	1574.55	4646.00	Kinabalu	S. Mokodou	5	2	5.0	3	2
32	T519	1568.20	4644.30	Kinabalu	S. Langanani	109	3	4.0	4	1
33	T520	1568.35	4644.35	Kinabalu	S. Nigong	4	4	5.5	3	2
34	D516	1567.85	4644.75	Kinabalu	S. Mantukungar	6	2	4.0	2	2
35	D509	1553.45	4629.40	Ranau	S. Liodan	2	3	12.0	3	2
36	D510	1553.30	4629.05	Ranau	S. Kenipir	< 1	3	15.0	3	2
37	D511	1547.15	4626.20	Ranau	S. Mensangoh	< 1	4	15.0	3	2
38	D512	1546.85	4626.05	Ranau	S. Melaut	< 1	4	13.0	3	2
39	G522	1541.60	4621.50	Ranau	S. Melaut	1	4	6.0	3	1
40	D501	1558.85	4633.35	Ranau	S. Mesilau	10	4	12.0	3	2
41	D502	1558.85	4633.10	Ranau	S. Liwagu	2	4	10.0	3	2
42	G501	1557.50	4637.40	Ranau	S. Banbangan	7	3	7.0	4	1
43	D507	1551.65	4630.50	Ranau	S. Samalang	< 1	3	8.0	3	2
44	G502	1552.50	4636.70	Ranau	S. Kihunut	2	3	4.0	4	1
45	G508	1552.15	4637.35	Ranau	S. Kenipir	2	4	10.0	4	1
46	D515	1545.90	4630.15	Ranau	S. Luidu	7	4	20.0	2	2
47	F541	1546.80	4639.90	Ranau	S. Terelebau	1	4	8.0	3	1
48	F542	1546.95	4639.65	Ranau	S. Melaut	1	5	12.0	4	1
49	T523	1544.60	4636.35	Ranau	S. Kingangaran	6	3	4.5	3	3
50	P531	1540.25	4633.05	Ranau	S. Telamas	4	4	5.0	4	2

Stream flow\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)

Grain size\*2: coarse-grained (1), medium-grained (2), fine-grained (3), clayey (4)

Ser. No.	Sample No.	Coordinates		Topographic Map Sheet	Name of Stream	Weight (g)	Order	Width (m)	Flow *1	Size *2
		N	E							
51	P532	1540.50	4633.35	Ranau	S. Telamas	2	1	3.0	4	2
52	N501	1555.30	4641.85	Ranau	S. Mensaban	3	3	7.0	3	1
53	G503	1553.85	4640.60	Ranau	S. Kaingaran	5	3	5.0	3	2
54	B587	1549.07	4643.80	Ranau	S. Liwagu	2	3	3.0	3	1
55	P530	1539.95	4645.20	Ranau	S. Sinelon	6	3	6.0	4	2
56	R514	1528.65	4629.10	Barambang	S. Kegibangan	7	3	10.0	3	2
57	Y627	1527.73	4628.12	Barambang	S. Kegibangan	6	3	8.0	4	1
58	Y628	1527.60	4628.36	Barambang	S. Kegibangan	4	3	10.0	4	1
59	C541	1523.10	4621.40	Barambang	S. Kionop	< 1	3	5.0	1	3
60	B582	1519.54	4621.37	Barambang	S. Kaingaran	2	4	5.0	4	1
61	G537	1527.25	4636.80	Barambang	S. Kegibangan	1	3	4.0	4	1
62	G535	1526.50	4636.20	Barambang	S. Kegibangan	2	4	4.0	3	1
63	G536	1526.15	4636.30	Barambang	S. Kegibangan	3	4	4.0	3	1
64	G534	1523.35	4636.20	Barambang	S. Kegibangan	4	3	3.0	4	1
65	Y624	1520.50	4634.25	Barambang	S. Pisa	2	3	6.0	4	1
66	Y621	1517.65	4636.50	Barambang	S. Kegibangan	1	3	3.5	3	2
67	Y622	1517.70	4635.60	Barambang	S. Liwagu	1	4	7.0	3	2
68	G530	1507.45	4630.50	Barambang	S. Kaintano B.	< 1	3	4.0	3	1
69	G531	1507.65	4631.45	Barambang	S. Sinsuran	< 1	4	2.0	3	1
70	G539	1528.00	4640.40	Barambang	S. Kegibangan	4	2	1.0	4	1
71	G538	1527.30	4641.45	Barambang	S. Kegibangan	3	3	3.0	4	1
72	G541	1527.92	4643.76	Barambang	S. Taliu	1	3	4.0	4	1
73	G509	1527.45	4645.25	Barambang	S. Penutongan	2	3	6.0	4	2
74	G525	1522.05	4646.75	Barambang	S. Wallai	< 1	3	1.5	4	3
75	G526	1522.05	4646.60	Barambang	S. Wallai	< 1	3	3.0	4	3
76	F540	1514.75	4648.60	Barambang	S. Bidon	1	4	7.5	4	2
77	P529	1514.05	4645.80	Barambang	S. Bidon	< 1	3	5.0	4	2
78	P519	1620.10	4649.45	Tandek	S. Bandau	< 1	5	15.0	2	3
79	P521	1621.20	4659.65	Tandek	S. Tandek	< 1	3	4.0	3	3
80	P526	1620.25	4659.55	Tandek	S. Rosak	< 1	4	10.0	2	3
81	P525	1618.95	4652.70	Tandek	—	1	3	6.0	2	3
82	P518	1619.00	4655.40	Tandek	S. Bongon	5	5	15.0	3	3
83	M571	1634.90	4668.10	Tandek	S. Silimpodon	54	3	2.0	2	2
84	M570	1630.85	4662.10	Tandek	S. Marasinsim	19	3	8.0	1	2
85	G519	1624.65	4661.05	Tandek	S. Baliajong	2	3	2.0	2	1
86	P528	1636.80	4676.70	Tandek	—	2	3	4.0	2	1
87	U518	1601.50	4649.20	Gana	S. Pamaitan	2	4	10.0	2	2
88	P517	1617.45	4658.80	Gana	S. Rosak	< 1	4	3.5	3	3
89	U520	1612.40	4659.85	Gana	S. Menurodjang	< 1	3	8.0	2	2
90	U521	1609.45	4657.50	Gana	S. Bongon	2	4	12.0	3	2
91	U519	1606.30	4651.65	Gana	S. Kinaram	1	3	3.5	3	2
92	U522	1608.75	4656.60	Gana	S. Kinaram	2	3	6.0	3	2
93	U523	1605.45	4651.95	Gana	S. Kinaram	1	4	7.0	2	2
94	R505	1595.45	4650.65	Gana	S. Pamaitan	< 1	4	6.0	2	3
95	R506	1595.40	4650.30	Gana	S. Pamaitan	2	3	6.0	2	3
96	R507	1595.70	4650.15	Gana	S. Pamaitan	45	3	5.0	3	3
97	R508	1595.35	4658.60	Gana	S. Pamaitan	< 1	3	5.0	3	2
98	G511	1603.90	4666.65	Gana	S. Bengkoka	< 1	3	4.0	2	3
99	G512	1604.15	4666.40	Gana	S. Bengkoka	1	3	8.0	2	3
100	M568	1615.35	4671.55	Gana	S. Bengkoka	1	5	20.0	1	3

Stream flow\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)

Grain size\*2: coarse-grained (1), medium-grained (2), fine-grained (3), clayey (4)

Ser. No.	Sample No.	Coordinates		Topographic Map Sheet	Name of Stream	Weight (g)	Order	Width (m)	Flow *1	Size *2
		N	E							
101	M569	1615.60	4671.80	Gana	S. Bengkoka	2	4	20.0	2	3
102	G523	1614.40	4670.80	Gana	S. Bengkoka	1	3	3.5	3	3
103	R510	1608.05	4670.65	Gana	S. Bengkoka	< 1	4	20.0	4	2
104	G515	1605.50	4672.65	Gana	S. Bengkoka	< 1	3	3.0	3	3
105	G513	1594.25	4675.80	Gana	S. Linkabau	< 1	3	4.0	3	3
106	G514	1594.50	4676.20	Gana	S. Linkabau	< 1	3	3.0	3	3
107	T502	1581.80	4654.00	Merungin	S. Kapuakan	29	4	11.0	3	2
108	T503	1581.65	4654.10	Merungin	S. Pandiruan	13	4	7.5	3	2
109	R502	1581.50	4659.25	Merungin	S. Daramakan	2	3	5.0	3	2
110	R501	1574.80	4656.90	Merungin	S. Mirali	4	3	3.0	3	2
111	F503	1570.90	4654.00	Merungin	S. Mankadan	20	5	25.0	4	1
112	F504	1570.70	4653.85	Merungin	S. Langanan	18	4	10.9	4	1
113	T511	1571.00	4655.95	Merungin	S. Mirali	68	5	15.0	3	2
114	M501	1563.25	4651.45	Merungin	S. Luhan	92	3	5.0	4	2
115	M502	1563.05	4651.60	Merungin	S. Mirali	3	5	10.0	3	2
116	M503	1563.75	4653.40	Merungin	S. Mirali	< 1	4	8.0	3	2
117	R504	1585.40	4665.95	Merungin	S. Luanan	< 1	3	9.0	4	2
118	T505	1582.45	4665.25	Merungin	S. Luanan	2	3	4.0	3	1
119	T507	1579.80	4668.90	Merungin	S. Mirali	1	2	4.5	2	2
120	T506	1577.35	4663.00	Merungin	S. Merungin	< 1	3	4.5	2	2
121	M504	1574.15	4661.60	Merungin	S. Mirali	1	4	15.0	4	2
122	T512	1566.10	4662.80	Merungin	S. Kaingaran	3	4	8.0	3	3
123	D602	1566.60	4668.65	Merungin	S. Kawiyan	< 1	4	10.0	2	3
124	D603	1565.95	4668.25	Merungin	S. Kawiyan	< 1	3	3.0	3	2
125	D601	1562.90	4669.65	Merungin	S. Kawiyan	< 1	4	8.0	2	3
126	T509	1586.65	4670.10	Merungin	S. Melinsan	2	3	6.0	3	2
127	T510	1586.65	4670.40	Merungin	S. Melinsan	2	3	6.5	3	1
128	R503	1581.05	4671.50	Merungin	S. Melinsan	< 1	3	18.0	2	4
129	T508	1579.95	4670.95	Merungin	S. Melinsan	< 1	4	5.5	2	3
130	T513	1570.15	4670.30	Merungin	S. Kawiyan	3	4	7.0	2	3
131	T514	1570.45	4670.35	Merungin	S. Kaingaran	4	4	15.0	3	2
132	U549	1569.95	4672.60	Merungin	S. Kaingaran	< 1	4	3.0	3	2
133	P501	1546.95	4649.65	Paginatan	S. Mindahuon	1	4	2.5	4	2
134	F501	1560.65	4650.75	Paginatan	S. Kananapon	3	4	9.0	4	1
135	F502	1560.30	4651.10	Paginatan	S. Mirali	3	4	11.0	4	1
136	P510	1560.20	4654.35	Paginatan	S. Mirali	< 1	3	4.0	3	3
137	P511	1560.30	4654.70	Paginatan	S. Mirali	< 1	4	8.0	3	3
138	P512	1561.70	4654.35	Paginatan	S. Mirali	< 1	3	4.0	4	1
139	U502	1555.90	4651.45	Paginatan	S. Bayaan	4	3	10.0	3	2
140	U503	1555.95	4651.70	Paginatan	S. Bereing	1	3	20.0	4	2
141	H501	1541.00	4656.70	Paginatan	S. Malopang	< 1	3	13.0	3	3
142	U505	1539.45	4655.75	Paginatan	S. Tassun	1	4	8.0	3	2
143	U515	1561.20	4663.75	Paginatan	S. Kaingaran	2	4	9.0	3	2
144	P514	1561.10	4664.05	Paginatan	S. Kaingaran	< 1	3	5.0	3	2
145	P513	1540.90	4666.70	Paginatan	S. Meringan	< 1	3	10.0	4	1
146	H503	1550.50	4670.15	Paginatan	S. Dual	1	3	5.0	3	2
147	H504	1550.80	4670.10	Paginatan	S. Tungud	2	3	5.0	3	2
148	P508	1550.20	4670.50	Paginatan	S. Karunsadun	< 1	3	10.0	3	1
149	U506	1550.45	4674.50	Paginatan	S. Tungud	1	4	6.0	3	2
150	U507	1550.35	4674.75	Paginatan	S. Tungud	2	4	30.0	3	2

Stream flow\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)

Grain size\*2: coarse-grained (1), medium-grained (2), fine-grained (3), clayey (4)

Ser. No.	Sample No.	Coordinates		Topographic Map Sheet	Name of Stream	Weight (g)	Order	Width (m)	Flow *1	Size *2
		N	E							
151	H518	1526.10	4649.35	Tampias	S. Kagibangan	< 1	5	5.0	4	2
152	G520	1514.20	4649.90	Tampias	S. Bidon	1	3	4.0	4	1
153	G521	1514.20	4649.55	Tampias	S. Bidon	1	5	4.0	3	1
154	P502	1534.20	4657.45	Tampias	S. Mankalabu	5	4	3.0	4	2
155	H515	1527.50	4650.60	Tampias	S. Libangan	< 1	3	5.0	3	1
156	U529	1527.95	4652.80	Tampias	S. Langodot	< 1	3	3.0	3	2
157	H516	1528.70	4657.70	Tampias	S. Bidon	< 1	4	10.0	4	2
158	H517	1528.70	4657.40	Tampias	S. Bidon	< 1	5	3.0	3	2
159	P522	1520.95	4659.30	Tampias	S. Bidon	< 1	3	5.0	3	2
160	T525	1517.80	4655.50	Tampias	S. Lakimut	< 1	3	3.0	3	2
161	U532	1518.80	4657.65	Tampias	S. Mentabungan	< 1	4	10.0	3	2
162	R511	1514.50	4652.90	Tampias	S. Bidon	< 1	4	9.0	2	2
163	P506	1533.25	4666.75	Tampias	S. Meringkan	1	4	13.0	4	1
164	P507	1534.20	4664.20	Tampias	S. Bilisok	< 1	3	7.0	4	1
165	H502	1530.80	4668.70	Tampias	S. Kalawatan	< 1	4	5.0	3	2
166	D556	1525.70	4663.10	Tampias	S. Bidon	< 1	3	5.0	3	2
167	Y582	1513.00	4669.40	Tampias	S. Karamuak	< 1	4	12.0	3	3
168	P523	1531.95	4676.05	Tampias	S. Liwagu	1	3	5.0	3	3
169	P524	1533.10	4675.95	Tampias	S. Menkadait	6	3	8.0	4	1
170	Y575	1523.25	4675.90	Tampias	S. Taviu	< 1	4	15.0	3	1
171	Y577	1523.40	4675.70	Tampias	S. Taviu	< 1	4	10.0	3	2
172	Y578	1524.40	4676.50	Tampias	S. Taviu	< 1	3	1.0	2	3
173	Y580	1514.10	4672.40	Tampias	S. Karamuak	2	4	5.0	3	3
174	Y211	1575.30	4677.60	Linkabau	S. Karagasan	1	3	5.0	3	2
175	K202	1589.45	4689.60	Linkabau	S. Buan	1	3	10.0	3	3
176	S206	1579.50	4683.30	Linkabau	S. Ogan	< 1	3	5.0	3	3
177	S205	1574.10	4681.93	Linkabau	S. Sugut	2	3	4.0	3	3
178	Y212	1574.60	4684.55	Linkabau	S. Ogan	< 1	3	10.0	3	3
179	Y207	1574.00	4686.12	Linkabau	S. Sugut	2	2	6.0	4	2
180	Y209	1575.25	4688.15	Linkabau	S. Tungtonarom	1	2	3.0	3	3
181	C207	1564.57	4682.70	Linkabau	S. Soviun	2	3	5.0	2	1
182	D203	1582.65	4696.95	Linkabau	S. Linkabau	1	4	16.0	2	3
183	S204	1580.75	4698.90	Linkabau	S. Karapui	2	2	4.0	2	3
184	C210	1576.10	4690.85	Linkabau	S. Yaigau	2	2	5.0	2	1
185	K201	1578.20	4696.25	Linkabau	S. Sugut	1	2	3.0	3	4
186	Y206	1577.95	4698.10	Linkabau	S. Puntodlong	1	3	5.0	3	4
187	P208	1564.10	4692.55	Linkabau	S. Tungud	< 1	3	7.0	3	2
188	P209	1566.40	4694.18	Linkabau	S. Tungud	2	3	6.0	3	2
189	S203	1568.20	4699.23	Linkabau	S. Tungud	2	3	7.0	2	3
190	D202	1567.05	4699.75	Linkabau	S. Sasau	127	3	14.0	3	2
191	Y214	1584.85	4703.35	Linkabau	S. Sugut	1	2	1.5	2	4
192	P210	1582.35	4702.80	Linkabau	S. Sugut	1	2	4.0	3	2
193	H206	1566.70	4704.22	Linkabau	S. Tungud	29	2	6.0	3	2

Stream flow\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)

Grain size\*2: coarse-grained (1), medium-grained (2), fine-grained (3), clayey (4)

## Appendix 5

Results of qualitative mineral examination of  
pan concentrates in Kinabalu area









Ser. No.	Sample No.	Native gold	Native silver	Magnetite	Caronite	Spinel	Resatite	Ilmenite	Leucosene	Artile	Brookite	Pyrite	Goethite	Chalcopyrite	Bornite	Olivine	Augite	Hypersthene	Holblende	Actinolite	Clinzoisite	Tourmaline	Garnet	Zircon	Monazite	Quartz	Feldspar	Apatite	Biotite	Muscovite	Epidote	Cimabar	Clastics
101	M569			18			15	tr												4					40	17	2				2		
102	G523			10			43	tr	2															1	25	15	2				2		
103	R510			19	1		10	tr	1	1		1			tr									1	57	2	1	7			7		
104	G515			15			14	tr				tr												1	61	1					6		
105	G513			12			23	tr	tr	2														1	43	1	9				9		
106	G514			9			27	tr		tr		1											tr	1	55	3					5		
107	T502			57	5		8	tr				4				11	tr	tr							10	2					5		
108	T503			57	13		13	tr	tr	tr					1	tr	tr	tr							10	1					4		
109	R502			25	1		32	tr	tr	tr		tr			1	tr	tr	tr						18	1	tr					2		
100	R501			45	6	tr	30	tr		1	4	1	tr	tr	tr	1	tr	tr					9	tr	16	1					3		
111	F503			26	tr		7	tr			tr	17	53				1	tr	47				tr	tr	13	6							
112	F504			21	1		2	tr			tr	63	6			tr	tr	tr					tr	tr	5	1					1		
113	T511			9			1	tr				85	tr	tr		tr	tr	tr							19	1							
114	M501			12	tr			tr				tr	tr			tr	tr	tr						2	1	1							
115	M502			16			55	tr		tr		tr	1			tr	tr	tr					tr	tr	13	1							
116	M503			tr			7	tr	tr	tr		tr	tr			tr	tr	tr						2	91	tr							
117	R504			23			14	tr	tr	tr		2				tr	tr	tr						1	47							12	
118	T505			12	1		54	tr	tr	tr					1	tr	tr	tr						tr	27							3	
119	T507			9	25		18	tr	tr	tr		1				2	tr	tr						tr	16	24						2	
120	T506			42	1			tr	tr	tr		1				1								tr	46	tr						6	
121	M504			9	tr		41	tr	tr	tr	tr	tr				tr	2	3						tr	46	tr						18	
122	T512			7			18	tr		tr		1												tr	56		tr					5	
123	D602			3			31		tr									3						3	42	12	1					3	
124	D603			3			26										1		5					3	42	11						4	
125	D601			3			30		8															5	45		1					4	
126	T509			17	1	tr	28	tr		1		1												tr	42		tr					8	
127	T510			4			7	tr				11												tr	74							5	
128	R503			25			28	tr		tr		tr												tr	37							10	
129	T508			12			7	tr	tr	tr														tr	63		1					16	
130	T513			5			10	tr	tr	tr														tr	63	4	tr					15	
131	T514			5			24	tr									1	3						2	50	10	1					3	
132	U549			36	2	1	10	tr	1	tr					2		1							tr	40	1	1					4	
133	P501			1			15	tr	tr			1												tr	63							19	
134	F501			33			60	tr	tr	tr	tr	1					2	1	tr					tr	1	1	2						
135	F502			19			76	tr	tr	tr	tr	1					1	1	tr					tr	1	1	1						
136	P510			9			7	tr	tr	tr	1													tr	53	3	tr	tr				21	
137	P511			25			27	tr	tr	tr	1													tr	26	6						14	
138	P512			16			8	tr		5														tr	55	5						9	
139	U502			18	2		55	tr	tr	tr					tr		4	11	1					tr	5	4							
140	U503			tr			45	tr	tr	tr	tr	tr												tr	41	tr							
141	M501			15			5	tr	tr			2												tr	57	tr						19	
142	U505						tr	tr			tr	tr	12											tr	88	tr							
143	U515			12			19	tr	2	tr														tr	53	5	1					6	
144	P514			3			18	tr	4	tr														tr	39	25	1	2				2	
145	P513			25	tr		25	tr	tr	tr						tr								tr	42	1						6	
146	M503			21			23	tr	tr	tr		tr	2											tr	46							6	
147	M504			20			43	tr	tr	tr	1													tr	33							2	
148	P508			35	tr		16	tr	tr	tr	1		2			2	tr	1						tr	36							6	
149	U506			tr			15	tr	tr	tr			tr											tr	74	tr							
150	U507			1			34	tr	tr	tr		tr												tr	6	58	tr						

Ser. No.	Sample No.	Native gold	Native silver	Magnetite	Chromite	Spinel	hematite	Ilmenite	Leucoplene	Kutile	Brookite	Pyrite	Goethite	Chalcopyrite	Bornite	Olivine	Augite	Hypersphene	Hornblende	Actinolite	Clinzoisite	Tourmaline	Garnet	Zircon	Monazite	Quartz	Feldspar	Apatite	Biotite	Muscovite	Epidote	Cinnabar	Clastics
151	H518			6			4	tr				tr													73	2					15		
152	G520			2			5	tr		1		tr			2									tr		71	5					7	
153	G521			2			9	tr		tr		tr														74						14	
154	P502			2			2	tr		tr		tr														67	2					27	
155	H515			3			1	tr				tr														46	3					47	
156	U529						5				1	2	3											tr		88	tr						
157	H516			2			9	tr		1																72	4					10	
158	H517			tr			23	tr		tr		tr	1													60	tr					16	
159	P522			8		1	7	tr			tr		tr											1		58	tr					12	
160	T525							tr		6	2	tr	tr										1		8	tr							
161	U532			tr			17	tr		1	tr	tr	tr						1				1	3	tr	76	tr						
162	R511			15			12	tr		1		tr	tr											2		59		1				9	
163	P506			28		1	17	tr		1		tr	tr			9	tr	2						tr		34	tr					6	
164	P507			23		1	11	tr				tr	tr												55	2	tr					5	
165	H502			3			5	tr		tr		tr	tr					tr								69						21	
166	D556			tr			3	tr		5		tr	tr				tr							tr		68	tr						
167	Y582			8			8	tr					tr												5	75		2				3	
168	P523			tr		3	9	tr				3	3											4	47	3	1					8	
169	P524			16			2	tr				20								2				2		40	19						2
170	Y575			34			31	tr		1							tr	1						2		25	1						
171	Y577			15			24	tr		4									3					4		28	7					3	
172	Y578			19			29	tr		2						10	tr	1						tr		41							4
173	Y580			11			45	tr		1															33	9							4
174	Y211		tr	2			54																	tr	35	tr	tr	1					
175	X202			tr			41			tr		tr	tr										tr	1	37	tr	tr						
176	S206						5	tr		tr		tr												tr	15	80	tr						
177	S205			tr			57	tr		tr		tr												tr	11	32	tr						
178	Y212			tr			33	tr		1		tr	tr											tr	40	26	tr						
179	Y207			1			13	tr		1		tr	tr											tr	57	28	tr						
180	Y209						10	tr		tr		tr												tr	62	28	tr						
181	C207						3	tr		tr														tr	5	92	tr						
182	D203			tr			8	tr		2		tr												tr	45	45	tr						
183	S204						tr	tr		tr		tr												tr	3	97	tr						
184	C210			1			14	tr		tr		tr												tr	39	46	tr						
185	X210			tr			9	tr		tr		tr												tr	38	53	tr						
186	Y206			tr			18	tr		1		tr												tr	78	3							
187	P208			tr			12	tr		tr		tr												tr	27	61	tr						
188	P209			tr			22	tr		2		tr	tr											tr	24	51	tr						
189	S203						7	tr		tr														tr	34	59	tr						
190	D202			5		73	10	tr				tr												tr	18	tr	10						
191	Y214			16			4	tr		1		tr												tr	3	56	tr						
192	P210			tr			tr	tr		tr														tr	3	97	tr						
193	H206			1		86	3	tr		tr		tr												tr	tr	3	6						

Appendix 6

List of rock geochemical samples  
in Kinabalu area



Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Name of Stream	Descriptions	Geol. Unit
		N	E				
1	U516	1600.10	4645.43	Surob	S. Kinaram	sandstone	P <sub>2</sub> Cr
2	U526	1611.78	4637.16	Surob	S. Terantioan	sandstone	P <sub>2</sub> Cr
3	U553	1611.12	4632.99	Surob	S. Terantioan	sandstone	P <sub>2</sub> Cr
4	U556	1593.02	4635.13	Surob	S. Kinaram	peridotite	Ub
5	D518	1574.12	4648.28	Kinabalu	S. Mokodou	peridotite	Ub
6	D547	1564.73	4644.67	Kinabalu	S. Bangkud	serpentinite	Ub
7	D551	1566.49	4630.40	Kinabalu	S. Mesilau	sandstone	P <sub>1</sub> Ts
8	N644	1576.77	4638.42	Kinabalu	S. Kinapassan	diorite porphyry	I <sub>1</sub>
9	U527	1567.42	4641.26	Kinabalu	S. Langanani	sandstone	P <sub>2</sub> Cr
10	U542	1578.74	4623.86	Kinabalu	S. Libang	green schist	Ub
11	U543	1577.93	4622.98	Kinabalu	S. Libang	hornblende diorite	I <sub>1</sub>
12	Y589	1587.22	4647.53	Kinabalu	S. Kapuakan	gabbro	Ub
13	Y590	1585.66	4642.80	Kinabalu	S. Kapuakan	sandstone	P <sub>2</sub> Cr
14	Y591	1585.73	4642.65	Kinabalu	S. Kapuakan	sandstone	P <sub>2</sub> Cr
15	D504	1557.17	4648.64	Ranau	S. Kananapon	sandstone	P <sub>1</sub> Ts
16	D505	1554.24	4648.91	Ranau	S. bayaan	shale	P <sub>1</sub> Ts
17	D513	1546.92	4626.46	Ranau	S. Mensangoh	shale	P <sub>1</sub> Ts
18	D522	1560.93	4643.23	Ranau	S. Luhan	peridotite	Ub
19	D527	1560.83	4646.06	Ranau	S. Luhan	dacite porphyry	I <sub>1</sub>
20	D528	1559.95	4646.87	Ranau	S. Kananapon	peridotite	Ub
21	F545	1540.58	4639.90	Ranau	S. Tevelebau	phyllite	P <sub>1</sub> Ts
22	T524	1542.63	4634.75	Ranau	S. Kingangaran	phyllite	P <sub>1</sub> Ts
23	T526	1536.36	4626.34	Ranau	S. Melaut	sandstone	P <sub>1</sub> Ts
24	T527	1536.82	4630.35	Ranau	S. Telamas	phyllite	P <sub>1</sub> Ts
25	Y626	1514.55	4632.73	Barambang	S. Kegibangan	sandstone	P <sub>1</sub> Ts
26	G534	1624.95	4667.46	Tandek	S. Baliajong	hornblende gabbro	Ub
27	M572	1631.27	4668.63	Tandek	S. Silimpodon	basalt	KPCs
28	P527	1635.99	4670.71	Tandek	S. Tambalolong	serpentinite	Ub
29	U533	1624.95	4673.05	Tandek	S. Bengkoka	sandstone	P <sub>2</sub> Cr
30	M567	1617.59	4668.60	Gana	S. Bengkoka	sandstone	P <sub>2</sub> Cr
31	P515	1567.02	4659.85	Merungin	S. Mirali	dacite porphyry	I <sub>1</sub>
32	T501	1585.48	4650.81	Merungin	S. Kapuakan	sandstone	P <sub>2</sub> Cr
33	T504	1574.47	4674.39	Merungin	S. Sugut	sandstone	P <sub>2</sub> Cr
34	T517	1587.07	4655.91	Merungin	S. Daramakan	sandstone	P <sub>2</sub> Cr
35	T522	1587.36	4675.89	Merungin	S. Melinsan	sandstone	P <sub>2</sub> Cr
36	P509	1546.50	4669.82	Paginatan	S. Karunsadun	peridotite	Ub
37	U501	1553.91	4653.40	Paginatan	S. Bereing	sandstone	P <sub>1</sub> Ts
38	U508	1542.84	4674.31	Paginatan	S. Mailo	gabbro	Ub
39	U509	1541.95	4675.79	Paginatan	S. Mailo	gabbro	Ub
40	U510	1544.31	4675.61	Paginatan	S. Peraganpang	peridotite	Ub
41	U511	1544.97	4664.92	Paginatan	S. Meringkan	sandstone	P <sub>2</sub> Cr
42	U512	1538.60	4675.61	Paginatan	S. Menkadail	dolerite	KPCs
43	U513	1538.07	4674.57	Paginatan	S. Menkadail	peridotite	Ub
44	U514	1559.21	4662.87	Paginatan	S. Kaingaran	sandstone	P <sub>2</sub> Cr
45	N556	1519.29	4667.16	Tampias	S. Karamuak	sandstone	P <sub>2</sub> Cr
46	P503	1534.06	4655.03	Tampias	S. Mankalabu	sandstone	P <sub>1</sub> Ts
47	P505	1534.16	4654.54	Tampias	S. Mankalabu	sandstone	P <sub>1</sub> Ts
48	Y574	1510.74	4675.53	Tampias	S. Taviur	dolerite	KPCs
49	Y576	1523.20	4675.94	Tampias	S. Taviur	sandstone	P <sub>2</sub> Cr
50	Y584	1510.25	4663.27	Tampias	S. Karamuak	sandstone	P <sub>2</sub> Cr
51	Y210	1578.70	4686.93	Linkabau	S. Tungtonarom	sandstone	P <sub>2</sub> Cr
52	Y208	1571.30	4686.24	Linkabau	—	sandstone	P <sub>2</sub> Cr



## Appendix 7

Analytical results of rock geochemical samples  
in Kinabalu area









## Appendix 8

List and analytical results of  
soil geochemical samples in Kinabalu area



Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G.	S.	I.	H.	Vegetation	Al %	Co ppm	Cr ppm	Fe %	Ni ppm	Pt ppb
		N	E																
1	H508	1591.18	4646.56	Surob	harzburgite	Ub	40	D.B.	F	C	M	D	Primary forest	5.43	64	13594	31.96	2261	15
2	H509	1591.50	4646.58	Surob	harzburgite	Ub	30	R.B.	F	C	M	D	Primary forest	3.35	176	13591	45.78	4357	45
3	H510	1591.82	4646.65	Surob	harzburgite	Ub	30	B.	M	C	M	D	Primary forest	3.65	386	8836	36.55	5631	45
4	H511	1592.15	4646.72	Surob	harzburgite	Ub	30	D.B.	F	C	M	D	Primary forest	3.23	223	10912	43.00	5012	45
5	H512	1592.47	4646.70	Surob	harzburgite	Ub	30	D.B.	F	C	M	D	Primary forest	3.37	126	10227	41.95	3926	15
6	H513	1592.72	4646.70	Surob	harzburgite	Ub	30	R.B.	F	C	M	D	Primary forest	4.81	123	7932	36.54	3530	30
7	U554	1593.02	4635.57	Surob	serpentinite	Ub	30	R.B.	M	C	F	W	Primary forest	1.26	405	6907	21.14	7229	< 5
8	U555	1593.20	4635.43	Surob	serpentinite	Ub	20	B.	M	C	M	W	Primary forest	1.41	554	5762	19.24	5254	30
9	U557	1592.97	4636.02	Surob	serpentinite	Ub	30	D.B.	M	C	F	W	Primary forest	6.33	77	894	5.08	816	< 5
10	U551	1591.15	4644.52	Surob	gravel of ser.	G <sub>2</sub>	30	D.B.	F	C	M	W	Secondary forest	1.39	458	2933	15.83	4234	20
11	D539	1574.23	4648.60	Kinabalu	harzburgite	Ub	45	L.B.	F	C	M	W	Secondary forest	4.93	158	2612	8.43	1843	10
12	D540	1574.92	4648.05	Kinabalu	harzburgite	Ub	45	D.B.	R	C	M	W	Secondary forest	3.62	541	11956	18.81	3334	15
13	D546	1564.73	4644.67	Kinabalu	harzburgite	Ub	45	D.B.	F	C	M	W	Secondary forest	5.61	427	8401	30.65	3988	30
14	D548	1562.77	4643.57	Kinabalu	harzburgite	Ub	45	D.B.	F	C	M	W	Secondary forest	5.74	389	7170	20.72	4752	15
15	D553	1563.53	4640.62	Kinabalu	harzburgite	Ub	30	L.B.	M	S	S	D	Secondary forest	1.38	180	1360	7.26	1719	< 5
16	D554	1563.02	4640.98	Kinabalu	harzburgite	Ub	30	L.G.	M	S	S	D	Secondary forest	2.66	93	1109	6.16	1705	15
17	N502	1560.13	4642.22	Ranau	harzburgite	Ub	40	L.B.	R	C	M	D	Secondary forest	5.45	1212	8626	42.09	10797	50
18	N503	1560.08	4641.85	Ranau	harzburgite	Ub	40	R.B.	R	C	M	D	Secondary forest	7.35	413	9110	27.74	5452	30
19	N504	1560.73	4641.60	Ranau	harzburgite	Ub	50	L.B.	R	C	M	D	Secondary forest	10.83	138	6012	28.54	2232	30
20	N505	1561.37	4642.42	Ranau	harzburgite	Ub	40	B.	R	C	M	D	Secondary forest	6.37	862	12288	39.12	5570	30
21	G504	1552.55	4641.42	Ranau	harzburgite	Ub	20	W.	R	C	S	W	Primary forest	9.43	37	271	4.63	152	< 5
22	G505	1552.70	4641.44	Ranau	harzburgite	Ub	30	D.B.	M	C	S	W	Primary forest	3.29	469	5148	16.13	3570	15
23	G506	1552.28	4643.32	Ranau	harzburgite	Ub	20	L.B.	M	C	M	W	Primary forest	4.48	480	6433	11.75	1969	10
24	G507	1552.27	4643.52	Ranau	harzburgite	Ub	20	D.G.	M	S	M	W	Primary forest	2.52	489	8798	17.96	2328	15
25	D519	1561.10	4640.23	Ranau	harzburgite	Ub	45	L.R.B.	F	C	M	D	Secondary forest	10.83	36	429	9.23	165	< 5
26	D520	1560.90	4642.90	Ranau	harzburgite	Ub	45	D.B.	R	C	M	W	Primary forest	9.03	313	7940	30.39	3074	15
27	D521	1560.72	4640.62	Ranau	harzburgite	Ub	40	B.G.	M	C	M	W	Primary forest	6.21	136	1847	8.68	1261	5
28	D523	1560.53	4642.00	Ranau	harzburgite	Ub	45	D.B.	M	C	F	W	Primary forest	7.38	478	6942	26.42	2983	15
29	D524	1560.11	4642.57	Ranau	harzburgite	Ub	45	D.B.	M	C	F	W	Secondary forest	6.00	344	7227	21.34	3926	15
30	D525	1559.87	4643.12	Ranau	harzburgite	Ub	50	L.B.	M	S	F	W	Primary forest	2.66	172	2463	10.54	4401	15

\*Gravel: Many (M), Few (F), Rare or none (R)  
 \*\*Topography: Steep (S), Moderate (M), Flat (F)  
 \*Grain size: Sandy (S), Clayey (C)  
 \*\*Humidity: Dry (D), Wet (W)

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. S. #	T. S. #	H. S. #	Vegetation	Al %	Co ppm	Cr ppm	Fe %	Ni ppm	Pt ppb
		N	E															
31	D526	1559.30	4643.23	Ranau	harzburgite	Ub	45	L.R.B.	F	C	W	Primary forest	9.56	263	9596	33.08	4363	30
32	D529	1561.72	4640.12	Ranau	harzburgite	Ub	45	D.B.	M	C	W	Secondary forest	6.82	404	7970	20.85	4088	15
33	D530	1561.15	4643.45	Ranau	harzburgite	Ub	45	R.B.	R	C	W	Primary forest	7.02	506	9267	36.68	6208	45
34	D531	1561.36	4643.98	Ranau	harzburgite	Ub	45	D.R.B.	F	C	W	Primary forest	5.73	499	7273	30.28	4820	45
35	D532	1561.58	4644.50	Ranau	harzburgite	Ub	45	D.B.	R	C	W	Primary forest	8.64	268	6407	29.52	2270	30
36	D533	1561.48	4644.92	Ranau	harzburgite	Ub	40	L.B.	M	C	W	Primary forest	8.46	21	118	4.42	80	< 5
37	D534	1560.85	4646.30	Ranau	harzburgite	Ub	40	R.B.	R	C	W	Primary forest	8.66	257	8942	33.82	3043	30
38	D535	1559.93	4646.82	Ranau	harzburgite	Ub	45	B.G.	M	C	W	Secondary forest	3.12	204	3197	11.55	3022	15
39	D544	1562.04	4642.73	Ranau	harzburgite	Ub	40	D.B.	M	S	D	Primary jungle	4.19	358	5365	20.53	4968	30
40	D545	1561.80	4642.20	Ranau	harzburgite	Ub	40	R.B.	R	C	W	Secondary forest	6.22	328	5782	20.20	3795	45
41	G527	1551.03	4646.13	Ranau	harzburgite	Ub	30	B.	F	C	W	Secondary forest	3.47	340	5580	20.09	4554	15
42	G528	1551.23	4645.57	Ranau	harzburgite	Ub	30	L.B.	F	C	W	Secondary forest	3.16	192	3068	11.02	1977	15
43	G529	1551.60	4645.17	Ranau	harzburgite	Ub	30	L.G.	F	C	W	Secondary forest	3.32	112	1804	9.09	1870	5
44	U536	1627.23	4675.83	Tandek	serpentinite	Ub	45	B.	M	S	D	Bush	6.62	63	475	7.26	582	15
45	D536	1572.10	4654.57	Merungin	harzburgite	Ub	40	D.B.G.	M	C	W	Primary forest	1.92	456	11395	7.67	2161	15
46	D538	1573.05	4654.23	Merungin	harzburgite	Ub	35	L.G.	M	S	D	Primary forest	3.16	97	1397	5.60	1912	10
47	D542	1572.53	4657.12	Merungin	harzburgite	Ub	45	D.R.B.	M	S	D	Primary forest	9.59	59	296	6.72	130	< 5
48	D543	1571.65	4656.80	Merungin	harzburgite	Ub	45	B.	M	S	W	Primary forest	6.09	106	1165	5.89	1075	5

\*Gravel: Many (M), Few (F), Rare or none (R)

\*\*Grain size: Sandy (S), Clayey (C)

\*\*Topography: Steep (S), Moderate (M), Flat (F)

\*\*Humidity: Dry (D), Wet (W)

## Appendix 9

List of sample for stream sediment  
geochemical survey in Labuk area





Page 1

Grid: LCR

Area: Labuk

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
1	LCr01	Tongod	S. Tongod	—	P2Cr	3	7.0	4	2	B.G.
2	LCr02	Tongod	S. Tongod	sandstone	P2Cr	2	1.0	4	1	B.G.
3	LCr03	Tongod	S. Tongod	sandstone	P2Cr	2	4.0	4	1	B.G.
4	LCr04	Tongod	S. Tongod	sandstone	P2Cr	3	2.5	4	1	B.G.
5	LCr05	Tongod	S. Tongod	sandstone	P2Cr	1	1.0	4	1	B.G.

Grid: LCS

Area: Labuk

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
6	LCS01	Tongod	S. Munguaga	—	P2Cr	1	1.0	3	3	B.G.
7	LCS02	Tongod	S. Munguaga	—	P2Cr	3	10.0	4	2	B.G.
8	LCS03	Tongod	S. Liwaga	shale	P2Cr	1	2.5	3	2	B.G.
9	LCS04	Tongod	S. Tongod	s.s./sh.	P2Cr	1	2.0	3	2	B.
10	LCS05	Tongod	S. Tongod	s.s./sh.	P2Cr	1	1.0	3	2	B.
11	LCS06	Tongod	S. Tongod	siltstone	P2Cr	1	1.0	3	3	V.B.
12	LCS07	Tongod	S. Tongod	siltstone	P2Cr	1	1.0	3	4	V.B.
13	LCS08	Tongod	S. Tongod	—	P2Cr	3	25.0	4	2	P.B.

Grid: LCU

Area: Labuk

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
14	LCu01	Pinangah	S. Melikop	—	KPSp	2	8.0	3	3	L.B.
15	LCu02	Pinangah	S. Melikop	—	KPSp	2	4.0	3	3	L.B.

Grid: LCV

Area: Labuk

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
16	LCv01	Pinangah	S. Melikop	sandstone	P2Lb	3	8.0	3	2	B.G.
17	LCv02	Pinangah	S. Melikop	s.s./sh.	P2Lb	1	2.0	3	2	B.G.
18	LCv03	Pinangah	S. Melikop	sandstone	P2Lb	2	1.0	2	2	B.
19	LCv04	Pinangah	S. Melikop	s.s./sh.	P2Lb	1	1.0	3	1	B.G.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Page 2

Grid: LDR

Area: Labuk

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
20	LDr01	Tongod	S. Tongod	—	P2Cr	1	1.0	2	3	P.B.
21	LDr02	Tongod	S. Tongod	—	P2Cr	1	1.0	2	3	B.
22	LDr03	Tongod	S. Tongod	s.s./sh.	P2Cr	1	2.5	3	2	B.
23	LDr04	Tongod	S. Tongod	—	P2Cr	2	1.0	4	1	B.
24	LDr05	Tongod	S. Tongod	—	P2Cr	4	5.0	4	1	B.
25	LDr06	Tongod	S. Tongod	—	P2Cr	2	1.0	4	1	B.
26	LDr07	Tongod	S. Tongod	—	P2Cr	2	1.5	4	1	B.
27	LDr08	Tongod	S. Tongod	s.s./shale	P2Cr	4	0.5	4	2	B.
28	LDr09	Tongod	S. Tongod	sandstone	P2Cr	2	0.5	4	1	B.
29	LDr10	Tongod	S. Tongod	—	P2Cr	1	1.0	4	1	B.
30	LDr11	Tongod	S. Tongod	—	P2Cr	3	2.5	4	1	B.
31	LDr12	Tongod	S. Tongod	—	P2Cr	2	1.0	4	1	B.
32	LDr13	Tongod	S. Tongod	pillow lava	KPS	2	2.0	4	1	B.
33	LDr14	Tongod	S. Tongod	—	P2Cr	2	2.0	4	1	B.
34	LDr15	Tongod	S. Tongod	—	P2Cr	1	1.0	4	1	G.
35	LDr16	Tongod	S. Tongod	s.s./shale	P2Cr	1	1.0	4	1	L.B.
36	LDr17	Tongod	S. Tongod	—	P2Cr	3	4.0	4	1	B.
37	LDr18	Tongod	S. Tongod	—	P2Cr	1	1.5	4	1	L.B.
38	LDr19	Tongod	S. Tongod	—	P2Cr	1	1.0	3	1	L.B.
39	LDr20	Tongod	S. Tongod	sandstone	P2Cr	1	1.5	3	1	B.
40	LDr21	Tongod	S. Tongod	sandstone	P2Cr	2	1.5	4	2	B.
41	LDr22	Tongod	S. Tongod	s.s./shale	P2Cr	1	0.5	3	2	B.
42	LDr23	Tongod	S. Tongod	s.s./shale	P2Cr	2	2.5	3	2	B.
43	LDr24	Tongod	S. Tongod	sandstone	P2Cr	3	2.5	4	2	B.
44	LDr25	Tongod	S. Tongod	s.s./shale	P2Cr	1	1.0	3	2	B.
45	LDr26	Tongod	S. Tongod	s.s./shale	P2Cr	1	2.5	4	2	B.
46	LDr27	Tongod	S. Tongod	s.s./shale	P2Cr	2	2.5	4	2	B.
47	LDr28	Tongod	S. Tongod	s.s./shale	P2Cr	2	3.0	4	2	B.
48	LDr29	Tongod	S. Tongod	sandstone	P2Cr	1	2.0	4	1	G.
49	LDr30	Tongod	S. Tongod	sandstone	P2Cr	2	5.0	4	1	B.G.
50	LDr31	Tongod	S. Mananam	basalt	KPS	1	1.0	4	1	L.B.
51	LDr32	Tongod	S. Mananam	basalt	KPS	1	2.0	4	1	L.B.
52	LDr33	Tongod	S. Mananam	basalt	KPS	2	3.0	4	1	L.B.
53	LDr34	Tongod	S. Mananam	—	P2Cr	2	2.0	4	1	B.
54	LDr35	Tongod	S. Mananam	—	P2Cr	2	3.5	4	1	B.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)







Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Flow #2	Color
340	LEt01	Tongod	S. Milian	sandstone	KPsp	1	2.5	2	3	B.
341	LEt02	Tongod	S. Milian	---	KPsp	1	2.0	3	3	B.
342	LEt03	Tongod	S. Milian	---	KPsp	1	1.5	3	3	B.
343	LEt04	Tongod	S. Milian	---	KPsp	2	2.5	2	3	B.
344	LEt05	Tongod	S. Milian	---	KPsp	1	2.5	2	3	B.
345	LEt06	Tongod	S. Milian	---	KPsp	1	1.0	2	3	B.
346	LEt07	Tongod	S. Milian	---	KPsp	3	7.0	2	3	B.
347	LEt08	Tongod	S. Milian	sandstone	KPsp	1	0.5	2	2	B.
348	LEt09	Tongod	S. Milian	sandstone	KPsp	1	1.0	4	2	B.
349	LEt10	Tongod	S. Milian	sandstone	KPsp	3	5.0	3	2	B.
350	LEt11	Tongod	S. Milian	---	KPsp	1	1.5	2	3	B.
351	LEt12	Tongod	S. Milian	---	KPsp	1	1.0	2	3	B.
352	LEt13	Tongod	S. Milian	---	KPsp	2	1.5	2	3	Y.B.
353	LEt14	Tongod	S. Milian	---	KPsp	2	2.5	2	3	B.
354	LEt15	Tongod	S. Milian	---	KPsp	2	3.0	2	3	B.
355	LEt16	Tongod	S. Milian	---	KPsp	1	4.0	2	3	B.
356	LEt17	Tongod	S. Milian	sandstone	KPsp	1	1.0	3	3	Y.B.
357	LEt18	Tongod	S. Milian	---	KPsp	2	1.5	3	3	B.
358	LEt19	Tongod	S. Milian	---	KPsp	2	2.5	3	3	Y.B.
359	LEt20	Tongod	S. Milian	sandstone	KPsp	4	8.0	2	3	B.
360	LEt21	Tongod	S. Milian	---	KPsp	1	4.0	2	3	B.
361	LEt22	Tongod	S. Milian	---	KPsp	1	1.0	2	3	B.
362	LEt23	Tongod	S. Milian	---	KPsp	1	1.5	2	3	B.
363	LEt24	Tongod	S. Milian	sandstone	KPsp	2	2.0	2	3	B.G.
364	LEt25	Tongod	S. Milian	---	KPsp	1	1.2	2	3	D.G.
365	LEt26	Tongod	S. Milian	---	KPsp	1	1.5	2	3	G.B.
366	LEt27	Tongod	S. Tongod	---	P-Cr	1	1.0	3	3	P.B.
367	LEt28	Tongod	S. Tongod	---	P-Cr	5	15.0	3	2	Y.B.
368	LEt29	Tongod	S. Malagatan B	---	P-Cr	5	4.0	2	2	Y.B.
369	LEt30	Tongod	S. Malagatan B	---	P-Cr	2	1.5	2	2	Y.B.
370	LEt31	Tongod	S. Malagatan B	---	P-Cr	1	1.0	1	4	Y.B.
371	LEt32	Tongod	S. Malagatan B	---	P-Cr	5	15.0	3	4	Y.B.
372	LEt33	Tongod	S. Malagatan B	---	P-Cr	2	2.0	1	3	Y.B.
373	LEt34	Tongod	S. Malagatan B	---	G.	1	0.5	2	4	Y.B.
374	LEt35	Tongod	S. Malagatan B	---	P-Cr	1	0.5	2	4	Y.B.
375	LEt36	Tongod	S. Malagatan B	---	P-Cr	1	1.5	1	3	Y.B.
376	LEt37	Tongod	S. Malagatan B	---	P-Cr	1	2.0	1	3	Y.B.
377	LEt38	Tongod	S. Malagatan B	---	P-Cr	2	2.0	1	3	Y.B.
378	LEt39	Tongod	S. Malagatan B	---	P-Cr	1	3.0	1	3	B.C.
379	LEt40	Tongod	S. Malagatan B	sandstone	P-Cr	5	5.0	2	3	B.G.
380	LEt41	Tongod	S. Tongod	---	P-Cr	1	3.0	2	2	G.
381	LEt42	Tongod	S. Tongod	---	P-Cr	1	2.0	2	2	B.G.
382	LEt43	Tongod	S. Tongod	---	P-Cr	1	2.0	2	2	B.
383	LEt44	Tongod	S. Tongod	---	P-Cr	3	4.5	0	2	D.B.
384	LEt45	Tongod	S. Tongod	---	P-Cr	2	2.5	0	2	R.B.
385	LEt46	Tongod	S. Tongod	---	P-Cr	2	3.5	0	2	R.B.
386	LEt47	Tongod	S. Tongod	---	P-Cr	2	2.0	0	2	R.B.
387	LEt48	Tongod	S. Tongod	---	P-Cr	1	2.5	2	2	B.
388	LEt49	Tongod	S. Tongod	---	P-Cr	1	2.5	2	2	B.G.
389	LEt50	Tongod	S. Tongod	---	P-Cr	1	2.5	2	2	B.G.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Flow #2	Color
380	LEu01	Pinangah	S. Milian	---	KPsp	1	0.7	2	3	B.
381	LEu02	Pinangah	S. Milian	---	KPsp	2	4.0	2	3	Y.B.
382	LEu03	Pinangah	S. Milian	---	KPsp	2	3.0	2	3	Y.B.
383	LEu04	Pinangah	S. Milian	---	KPsp	1	1.0	3	3	B.
384	LEu05	Pinangah	S. Milian	---	KPsp	1	1.0	3	3	B.
385	LEu06	Pinangah	S. Milian	---	KPsp	1	1.0	2	3	D.L.G.
386	LEu07	Pinangah	S. Milian	sandstone	KPsp	2	5.0	3	2	L.G.
387	LEu08	Pinangah	S. Milian	sandstone	KPsp	3	3.0	3	2	L.G.
388	LEu09	Pinangah	S. Milian	sandstone	KPsp	2	2.0	3	2	L.G.
389	LEu10	Pinangah	S. Milian	sandstone	KPsp	1	0.8	2	2	L.G.
400	LEu11	Pinangah	S. Milian	sandstone	KPsp	2	2.0	3	2	G.B.
401	LEu12	Pinangah	S. Milian	sandstone	KPsp	2	1.5	3	2	B.G.
402	LEu13	Pinangah	S. Milian	sandstone	KPsp	2	2.5	2	2	B.G.
403	LEu14	Pinangah	S. Milian	sandstone	KPsp	2	2.0	2	2	B.G.
404	LEu15	Pinangah	S. Milian	---	KPsp	1	1.0	2	2	L.G.
405	LEu16	Pinangah	S. Milian	---	KPsp	1	1.5	2	2	L.G.
406	LEu17	Pinangah	S. Milian	---	KPsp	1	1.0	2	2	L.G.
407	LEu18	Pinangah	S. Milian	sandstone	KPsp	2	1.5	2	2	L.G.
408	LEu19	Pinangah	S. Milian	sandstone	KPsp	2	2.5	2	2	L.G.
409	LEu20	Pinangah	S. Milian	sandstone	KPsp	1	0.8	2	2	G.
410	LEu21	Pinangah	S. Milian	sandstone	KPsp	2	2.0	3	2	G.
411	LEu22	Pinangah	S. Milian	sandstone	Nt1J	1	1.0	3	2	G.
412	LEu23	Pinangah	S. Milian	sandstone	Nt1J	2	1.5	3	2	G.
413	LEu24	Pinangah	S. Pinangah	sandstone	KPsp	3	3.5	4	2	B.
414	LEu25	Pinangah	S. Pinangah	sandstone	KPsp	2	2.0	3	2	B.
415	LEu26	Pinangah	S. Pinangah	sandstone	KPsp	2	2.5	4	2	B.
416	LEu27	Pinangah	S. Pinangah	sandstone	KPsp	3	5.0	3	3	G.B.
417	LEu28	Pinangah	S. Milian	sandstone	KPsp	2	2.5	3	2	G.B.
418	LEu29	Pinangah	S. Milian	---	KPsp	1	1.0	4	2	L.B.
419	LEu30	Pinangah	S. Milian	---	KPsp	1	1.5	4	2	B.
420	LEu31	Pinangah	S. Milian	---	KPsp	2	3.5	4	2	E.B.
421	LEu32	Pinangah	S. Ayop	sandstone	KPsp	2	1.0	2	1	E.B.
422	LEu33	Pinangah	S. Ayop	sandstone	KPsp	3	8.0	2	1	E.B.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
423	LEv01	Pinangah	S. Imbak	sandstone	Nz1J	2	1.5	4	2	G.
424	LEv02	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	1.5	2	3	Y.G.
425	LEv03	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	1.0	2	3	D.G.
426	LEv04	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	1.0	2	3	Y.G.
427	LEv05	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	1.0	2	3	Y.G.
428	LEv06	Pinangah	S. Imbak	s.s./mud.	Nz1J	4	4.0	2	3	D.G.
429	LEv07	Pinangah	S. Imbak	s.s./mud.	Nz1J	3	4.0	2	3	G.Y.
430	LEv08	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	4.0	2	3	G.Y.
431	LEv09	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	1.0	2	3	G.Y.
432	LEv10	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	1.0	2	3	G.Y.
433	LEv11	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	2.0	2	3	Y.G.
434	LEv12	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	2.0	2	3	Y.G.
435	LEv13	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	2.0	2	3	Y.G.
436	LEv14	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	1.0	2	3	D.G.
437	LEv15	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	1.0	2	3	D.G.
438	LEv16	Pinangah	S. Imbak	s.s./mud.	Nz1J	3	6.0	2	3	G.Y.
439	LEv17	Pinangah	S. Imbak	s.s./mud.	Nz1J	3	2.0	2	3	G.Y.
440	LEv18	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	3.0	2	3	G.Y.
441	LEv19	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	1.0	2	3	D.G.
442	LEv20	Pinangah	S. Imbak	s.s./mud.	Nz1J	3	5.0	2	3	Y.G.
443	LEv21	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	1.0	2	3	D.G.
444	LEv22	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	2.0	2	3	D.G.
445	LEv23	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	0.5	2	2	D.G.
446	LEv24	Pinangah	S. Imbak	s.s./mud.	Nz1J	1	2.0	2	2	Y.
447	LEv25	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	4.0	2	2	D.G.
448	LEv26	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	1.2	2	3	B.
449	LEv27	Pinangah	S. Imbak	s.s./mud.	Nz1J	2	1.0	2	4	G.B.
450	LEv28	Pinangah	S. Imbak	s.s./shale	Nz1J	3	1.0	4	2	L.G.
451	LEv29	Pinangah	S. Imbak	s.s./shale	Nz1J	2	1.5	4	2	L.G.
452	LEv30	Pinangah	S. Imbak	---	Nz1J	3	2.0	3	2	B.

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
468	LEw16	Pinangah	S. Pinangah	shale	Nz1J	2	1.0	3	3	G.B.
469	LEw17	Pinangah	S. Pinangah	shale	Nz1J	2	1.5	2	3	G.B.
470	LEw18	Pinangah	S. Pinangah	shale	Nz1J	4	1.0	2	3	G.B.
471	LEw19	Pinangah	S. Pinangah	shale	Nz1J	2	0.7	3	3	D.B.
472	LEw20	Pinangah	S. Pinangah	shale	Nz1J	3	2.0	4	3	D.B.
473	LEw21	Pinangah	S. Pinangah	shale	Nz1J	2	1.5	3	3	Y.B.
474	LEw22	Pinangah	S. Pinangah	shale	Nz1J	2	1.5	4	3	D.B.
475	LEw23	Pinangah	S. Pinangah	shale	Nz1J	1	1.0	2	3	D.B.
476	LEw24	Pinangah	S. Pinangah	shale	Nz1J	3	7.0	2	3	D.B.
477	LEw25	Pinangah	S. Pinangah	shale	Nz1J	1	1.5	4	3	L.B.
478	LEw26	Pinangah	S. Pinangah	shale	Nz1J	1	1.0	4	3	G.B.
479	LEw27	Pinangah	S. Pinangah	shale	Nz1J	1	1.0	2	3	D.B.
480	LEw28	Pinangah	S. Pinangah	shale	Nz1J	1	1.5	2	3	D.B.
481	LEw29	Pinangah	S. Pinangah	shale	Nz1J	1	1.5	4	3	D.B.
482	LEw30	Pinangah	S. Pinangah	shale/s.s.	Nz1J	2	5.0	3	2	B.
483	LEw31	Pinangah	S. Pinangah	shale	Nz1J	1	1.0	4	3	B.
484	LEw32	Pinangah	S. Inarat	shale	Nz1J	1	2.0	3	3	G.B.
485	LEw33	Pinangah	S. Inarat	s.s./shale	Nz1J	1	3.0	2	2	B.
486	LEw34	Pinangah	S. Inarat	s.s./shale	Nz1J	2	2.0	3	3	L.B.
487	LEw35	Pinangah	S. Inarat	shale	Nz1J	2	3.0	3	3	D.B.
488	LEw36	Pinangah	S. Pinangah	shale	Nz1J	1	1.0	3	3	Y.B.
489	LEw37	Pinangah	S. Pinangah	shale	Nz1J	1	1.5	4	3	L.G.
490	LEw38	Pinangah	S. Pinangah	shale	Nz1J	1	1.5	4	3	D.B.
491	LEw39	Pinangah	S. Pinangah	shale	Nz1J	1	1.0	4	3	G.G.
492	LEw40	Pinangah	S. Pinangah	shale	Nz1J	1	1.0	4	3	G.

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
493	LFJ01	Kiabau	S. Tabuk	sandstone	PzGr	2	6.0	4	2	Y.B.
494	LFJ02	Kiabau	S. Tabuk	sandstone	PzGr	1	3.0	4	2	Y.B.
495	LFJ03	Kiabau	S. Tabuk	sandstone	PzGr	1	2.0	4	2	B.
496	LFJ04	Kiabau	S. Tabuk	sandstone	PzGr	1	1.5	4	2	Y.B.
497	LFJ05	Kiabau	S. Tabuk	sandstone	PzGr	1	3.0	4	2	B.
498	LFJ06	Kiabau	S. Tabuk	sandstone	PzGr	1	4.0	4	2	Y.B.

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
499	LFk01	Kiabau	S. Tabuk	---	PzGr	1	1.5	4	2	G.
500	LFk02	Kiabau	S. Tabuk	---	PzGr	3	7.0	4	2	Y.B.
501	LFk03	Kiabau	S. Tabuk	---	PzGr	1	2.0	4	2	G.
502	LFk04	Kiabau	S. Tabuk	---	PzGr	1	3.0	4	2	Y.B.
503	LFk05	Kiabau	S. Tabuk	sandstone	PzGr	1	3.0	4	2	Y.B.
504	LFk06	Kiabau	S. Tabuk	---	PzGr	1	1.5	4	2	Y.B.
505	LFk07	Kiabau	S. Tabuk	sandstone	PzGr	1	2.0	4	2	Y.B.
506	LFk08	Kiabau	S. Tabuk	---	PzGr	1	4.0	4	2	Y.B.
507	LFk09	Kiabau	S. Tabuk	---	PzGr	1	3.0	4	2	Y.B.
508	LFk10	Kiabau	S. Tabuk	sandstone	PzGr	2	6.0	4	2	Y.B.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)









Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
752	LFv01	Pinangah	S. Sinarupa	P1b	1	1.0	3	1	B.
753	LFv02	Pinangah	S. Sinarupa	P1b	1	1.5	3	1	B.
754	LFv03	Sungai Imbak	S. Sinarupa	KSP	2	2.5	2	1	B.G.
755	LFv04	Sungai Imbak	S. Sinarupa	KSP	3	9.0	2	1	B.G.
756	LFv05	Sungai Imbak	S. Sinarupa	KSP	2	2.5	2	1	G.B.
757	LFv06	Sungai Imbak	S. Sinarupa	KSP	2	1.0	3	1	D.G.
758	LFv07	Sungai Imbak	S. Sinarupa	KSP	2	3.0	3	1	G.B.
759	LFv08	Sungai Imbak	S. Sinarupa	KSP	2	0.7	2	1	D.B.
760	LFv09	Sungai Imbak	S. Sinarupa	KSP	2	7.0	3	1	L.B.
761	LFv10	Sungai Imbak	S. Sinarupa	KSP	2	7.0	3	1	L.B.
762	LFv11	Sungai Imbak	S. Imbak	Qs	2	2.0	2	3	Y.B.
763	LFv12	Sungai Imbak	S. Imbak	Qs	2	4.0	1	2	Y.B.
764	LFv13	Sungai Imbak	S. Imbak	N2J	2	0.5	2	2	Y.B.
765	LFv14	Sungai Imbak	S. Imbak	N2J	2	2.0	2	2	Y.B.
766	LFv15	Sungai Imbak	S. Imbak	N2J	2	2.0	2	2	D.B.
767	LFv16	Sungai Imbak	S. Imbak	N2J	1	1.0	2	3	Y.B.
768	LFv17	Sungai Imbak	S. Imbak	N2J	2	1.0	2	3	D.B.
769	LFv18	Sungai Imbak	S. Imbak	N2J	2	3.5	2	3	Y.B.
770	LFv19	Sungai Imbak	S. Imbak	N2J	2	2.0	2	3	Y.B.
771	LFv20	Pinangah	S. Imbak	Qs	2	3.0	2	2	Y.B.
772	LFv21	Pinangah	S. Imbak	Qs	2	2.0	2	2	Y.B.
773	LFv22	Pinangah	S. Imbak	Qs	2	3.0	2	2	Y.B.
774	LFv23	Pinangah	S. Imbak	Qs	3	2.0	2	2	Y.B.
775	LFv24	Pinangah	S. Imbak	N2J	2	2.5	2	2	Y.B.
776	LFv25	Pinangah	S. Imbak	N2J	2	1.5	2	2	Y.B.
777	LFv26	Pinangah	S. Imbak	Qs	1	0.5	2	2	Y.B.
778	LFv27	Pinangah	S. Imbak	Qs	2	3.5	2	2	Y.B.
779	LFv28	Pinangah	S. Imbak	Qs	1	1.5	2	2	Y.B.
780	LFv29	Pinangah	S. Imbak	Qs	1	2.0	2	2	Y.B.
781	LFv30	Pinangah	S. Imbak	Qs	1	1.5	2	2	Y.B.
782	LFv31	Pinangah	S. Imbak	Qs	1	2.5	2	2	Y.B.
783	LFv32	Pinangah	S. Imbak	Qs	1	0.5	2	2	D.B.
784	LFv33	Pinangah	S. Imbak	Qs	1	2.0	2	2	D.B.
785	LFv34	Pinangah	S. Imbak	Qs	3	4.0	3	2	Y.B.
786	LFv35	Pinangah	S. Imbak	N2J	1	3.0	3	2	D.B.
787	LFv36	Pinangah	S. Imbak	N2J	1	1.5	3	2	Y.B.
788	LFv37	Pinangah	S. Imbak	N2J	1	3.5	3	2	Y.B.
789	LFv38	Pinangah	S. Imbak	N2J	1	3.0	3	2	Y.B.
790	LFv39	Pinangah	S. Imbak	N2J	2	3.0	3	2	Y.B.
791	LFv40	Pinangah	S. Imbak	N2J	2	3.0	4	2	Y.B.
792	LFv41	Pinangah	S. Imbak	N2J	2	3.5	4	2	Y.B.
793	LFv42	Pinangah	S. Imbak	N2J	1	2.5	2	2	Y.B.
794	LFv43	Pinangah	S. Imbak	N2J	1	1.0	2	2	Y.G.
795	LFv44	Pinangah	S. Imbak	N2J	2	1.5	2	3	Y.G.
796	LFv45	Pinangah	S. Imbak	N2J	4	10.0	2	2	Y.G.
797	LFv46	Pinangah	S. Imbak	N2J	3	1.0	2	2	Y.B.
798	LFv47	Pinangah	S. Imbak	N2J	1	1.0	2	3	D.G.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
799	LFw01	Pinangah	S. Pinangah	N2J	2	1.0	3	3	G.B.
800	LFw02	Pinangah	S. Pinangah	N2J	2	2.0	3	3	G.B.
801	LFw03	Pinangah	S. Pinangah	N2J	1	1.0	2	3	G.B.
802	LFw04	Pinangah	S. Pinangah	N2J	3	3.5	4	3	D.B.
803	LFw05	Pinangah	S. Pinangah	N2J	2	1.0	3	3	D.B.
804	LFw06	Pinangah	S. Pinangah	N2J	1	1.0	3	3	D.B.
805	LFw07	Pinangah	S. Pinangah	N2J	2	2.0	3	3	B.
806	LFw08	Pinangah	S. Pinangah	N2J	1	1.5	4	3	B.
807	LFw09	Pinangah	S. Pinangah	N2J	2	1.0	4	3	B.
808	LFw10	Pinangah	S. Pinangah	N2J	1	0.5	2	3	B.
809	LFw11	Pinangah	S. Pinangah	N2J	3	1.5	2	3	L.G.
810	LFw12	Pinangah	S. Pinangah	N2J	3	2.0	3	3	B.
811	LFw13	Pinangah	S. Pinangah	N2J	2	1.0	5	3	B.
812	LFw14	Pinangah	S. Pinangah	N2J	2	1.5	3	3	D.B.
813	LFw15	Pinangah	S. Pinangah	N2J	3	3.5	4	3	D.B.
814	LFw16	Pinangah	S. Pinangah	N2J	2	2.0	4	3	D.B.
815	LFw17	Pinangah	S. Pinangah	N2J	2	2.0	4	3	D.B.
816	LFw18	Pinangah	S. Pinangah	N2J	2	3.0	4	3	D.B.
817	LFw19	Pinangah	S. Pinangah	N2J	2	0.5	4	3	G.
818	LFw20	Pinangah	S. Pinangah	N2J	2	1.5	3	3	D.B.

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geol. Unit	Order	Width (m)	Flow #1	Size #2	Color
819	LGj01	Kiabau	S. Sovitun	P2Cr	1	1.5	1	1	Y.B.
820	LGj02	Kiabau	S. Sovitun	P2Cr	1	1.5	1	1	Y.B.
821	LGj03	Kiabau	S. Sovitun	P2Cr	1	2.0	2	1	Y.B.
822	LGj04	Kiabau	S. Sovitun	P2Cr	1	1.5	1	1	Y.B.
823	LGj05	Kiabau	S. Sovitun	P2Cr	4	10.0	2	1	Y.B.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Table with 16 columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow, Size, Color. Rows 824-853.

\*1: none (0), middle (1), slow (2), moderate (3), fast (4)  
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Table with 16 columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow, Size, Color. Rows 854-933.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow	Size	Color
939	Lsp01	Telupid	S. Labuk	basalt	RFCs	1	3.0	2	3	B.G.
960	Lsp02	Telupid	S. Telupid	sandstone	RFCs	3	7.0	3	1	G.
961	Lsp03	Telupid	S. Telupid	—	RFCs	3	7.0	3	1	B.G.
962	Lsp04	Telupid	S. Telupid	—	RFCs	2	10.0	4	1	B.G.
963	Lsp05	Telupid	S. Tapang	basalt	RFCs	2	1.0	2	2	B.
964	Lsp06	Telupid	S. Tapang	basalt	RFCs	2	1.0	2	1	B.
965	Lsp07	Telupid	S. Tapang	basalt	RFCs	2	5.0	2	1	B.
966	Lsp08	Telupid	S. Tapang	—	RFCs	2	6.0	3	2	B.
967	Lsp09	Telupid	S. Tapang	—	RFCs	2	6.5	3	2	B.
968	Lsp10	Telupid	S. Taviur	basalt	RFCs	4	55.0	3	3	B.G.
969	Lsp11	Telupid	S. Taviur	basalt	RFCs	1	2.0	2	2	Y.
970	Lsp12	Telupid	S. Taviur	basalt	RFCs	4	10.0	3	2	Y.
971	Lsp13	Telupid	S. Taviur	basalt	RFCs	1	1.0	2	1	Y.B.
972	Lsp14	Telupid	S. Taviur	basalt	RFCs	1	1.0	3	1	B.
973	Lsp15	Telupid	S. Taviur	basalt	RFCs	2	2.3	3	1	B.
974	Lsp16	Telupid	S. Taviur	basalt	RFCs	1	1.0	3	1	B.
975	Lsp17	Telupid	S. Taviur	basalt	RFCs	2	1.5	2	1	B.
976	Lsp18	Telupid	S. Taviur	basalt	RFCs	2	2.5	2	2	G.
977	Lsp19	Telupid	S. Taviur	basalt	RFCs	1	1.0	2	2	G.
978	Lsp20	Telupid	S. Taviur	—	RFCs	1	2.0	1	1	B.
979	Lsp21	Telupid	S. Taviur	—	RFCs	4	9.0	3	3	Y.
980	Lsp22	Telupid	S. Taviur	—	RFCs	2	2.0	2	2	B.
981	Lsp23	Telupid	S. Taviur	—	RFCs	2	2.5	2	2	B.
982	Lsp24	Telupid	S. Taviur	—	RFCs	2	3.0	2	2	B.
983	Lsp25	Telupid	S. Taviur	—	RFCs	2	3.0	1	4	B.
984	Lsp26	Telupid	S. Taviur	—	RFCs	4	9.0	3	2	B.
985	Lsp27	Telupid	S. Labuk	basalt	RFCs	1	1.5	2	1	B.
986	Lsp28	Telupid	S. Labuk	—	RFCs	2	6.0	2	1	B.
987	Lsp29	Telupid	S. Lividol	dolerite	RFCs	1	2.0	3	1	B.
988	Lsp30	Telupid	S. Lividol	dolerite	RFCs	2	1.5	3	1	B.
989	Lsp31	Telupid	S. Labuk	—	RFCs	2	2.0	3	1	G.B.
990	Lsp32	Telupid	S. Taviur	serpentinite	Ub	1	2.0	2	2	B.G.
991	Lsp33	Telupid	S. Labuk	—	RFCs	2	4.0	2	2	B.G.
992	Lsp34	Telupid	S. Labuk	—	RFCs	1	3.0	2	3	D.B.
993	Lsp35	Telupid	S. Labuk	—	RFCs	1	2.0	3	1	B.G.
994	Lsp36	Telupid	S. Labuk	—	RFCs	1	1.5	3	1	B.G.
995	Lsp37	Telupid	S. Taviur	—	P.G.	1	0.5	2	2	B.
996	Lsp38	Telupid	S. Taviur	—	P.G.	1	1.0	2	2	B.
997	Lsp39	Telupid	S. Kabayan	—	RFCs	1	1.5	4	1	G.
998	Lsp40	Telupid	S. Taviur	basalt	RFCs	2	1.5	2	1	B.
999	Lsp41	Telupid	S. Taviur	—	RFCs	1	0.5	2	1	B.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Ser. No.	Sample No.	Topographic Map Sheet	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow	Size	Color
924	Lgn01	Kiabau	S. Melajo	—	RFCs	3	8.0	2	3	B.R.
925	Lgn02	Kiabau	S. Melajo	—	RFCs	2	4.0	2	3	B.Y.
926	Lgn03	Kiabau	S. Melajo	—	Ub	1	2.0	3	3	B.Y.
927	Lgn04	Kiabau	S. Melajo	—	Ub	1	2.0	3	3	B.Y.
928	Lgn05	Kiabau	S. Melajo	—	Ub	2	6.0	3	3	B.Y.
929	Lgn06	Kiabau	S. Liwagu	—	RFCs	1	2.0	2	3	B.Y.
930	Lgn07	Kiabau	S. Liwagu	—	RFCs	2	3.0	2	3	B.Y.
931	Lgn08	Kiabau	S. Liwagu	—	RFCs	2	2.5	2	3	B.Y.
932	Lgn09	Kiabau	S. Kibarah	—	Ub	1	2.0	3	3	B.Y.
933	Lgn10	Kiabau	S. Kibarah	—	Ub	2	4.0	3	3	B.Y.
934	Lgn11	Kiabau	S. Kibarah	—	Ub	1	2.0	3	3	B.Y.
935	Lgn12	Kiabau	S. Kibarah	pillow bre.	RFCs	1	2.0	4	1	D.B.
936	Lgn13	Kiabau	S. Kibarah	pillow bre.	RFCs	1	0.8	3	2	D.B.
937	Lgn14	Kiabau	S. Baba	—	RFCs	1	1.0	2	3	B.R.
938	Lgn15	Kiabau	S. Baba	—	RFCs	1	1.0	2	3	B.R.
939	Lgn16	Kiabau	S. Baba	—	RFCs	1	1.0	2	3	B.Y.
940	Lgn17	Kiabau	S. Baba	basalt	RFCs	2	3.0	2	3	B.R.
941	Lgn18	Kiabau	S. Baba	—	RFCs	1	1.0	2	3	B.Y.
942	Lgn19	Kiabau	S. Baba	basalt	RFCs	1	3.0	2	3	B.R.
943	Lgn20	Kiabau	S. Ensuau	basalt	RFCs	2	2.5	3	4	Y.B.
944	Lgn21	Telupid	S. Liwagu	—	RFCs	2	5.0	2	1	B.
945	Lgn22	Telupid	S. Lividol	dolerite	RFCs	1	1.5	2	1	B.
946	Lgn23	Telupid	S. Lividol	dolerite	RFCs	1	1.5	3	1	B.G.
947	Lgn24	Telupid	S. Niontok	dolerite	RFCs	1	2.5	3	1	B.
948	Lgn25	Telupid	S. Bunchut	dolerite	RFCs	1	2.0	3	1	B.
949	Lgn26	Telupid	S. Liwagu	—	RFCs	1	3.0	2	1	B.
950	Lgn27	Telupid	S. Lividol	—	RFCs	2	5.0	3	2	B.G.
951	Lgn28	Telupid	S. Lividol	—	RFCs	1	0.5	3	2	B.G.
952	Lgn29	Telupid	S. Liwagu	basalt	RFCs	2	5.0	3	1	G.
953	Lgn30	Telupid	S. Liwagu	basalt	RFCs	1	1.0	3	1	G.
954	Lgn31	Telupid	S. Melajo	basalt	RFCs	2	5.0	3	2	G.
955	Lgn32	Telupid	S. Liwagu	basalt	RFCs	1	2.5	2	2	G.
956	Lgn33	Telupid	S. Liwagu	basalt	RFCs	1	2.0	2	2	G.
957	Lgn34	Telupid	S. Melajo	—	RFCs	1	3.0	1	3	G.
958	Lgn35	Telupid	S. Liwagu	—	RFCs	1	0.5	2	2	B.G.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)  
 \*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)



Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow, Size, Color. Contains 40 rows of data for various locations like Sungai Karamauk, Sungai Millian, etc.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow, Size, Color. Contains 40 rows of data for various locations like Sungai Karamauk, Sungai Liou-Liou, etc.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)







Area: Labuk

Grid: Lhm

Table with 10 columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow #, Size, Color. Contains data for samples Lhm01 to Lhm50.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Area: Labuk

Grid: Lhm

Table with 10 columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow #, Size, Color. Contains data for samples Lhm01 to Lhm60.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)



Area: Labuk Grid: LIs

Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow #1, Size #2, Color. Contains geological data for Labuk area (Page 37).

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)

Area: Labuk Grid: LIs

Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geology, Geol. Unit, Order, Width (m), Flow #1, Size #2, Color. Contains geological data for Labuk area (Page 38).

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)









Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geol. Unit, Geology, Order, Width (m), Flow, Size, Color. Contains data for samples 2047 to 2095.

Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geol. Unit, Geology, Order, Width (m), Flow, Size, Color. Contains data for samples 2097 to 2111.

Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geol. Unit, Geology, Order, Width (m), Flow, Size, Color. Contains data for samples 2112 to 2146.

Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geol. Unit, Geology, Order, Width (m), Flow, Size, Color. Contains data for samples 2072 to 2081.

Table with columns: Ser. No., Sample No., Topographic Map Sheet, Name of Stream, Geol. Unit, Geology, Order, Width (m), Flow, Size, Color. Contains data for samples 2082 to 2096.

\*1: none (0), puddle (1), slow (2), moderate (3), fast (4)
\*2: coarse grained (1), medium grained (2), fine grained (3), clayey (4)