showings are, respectively, given in Fig. II-2-4 and Table II-2-5. Sketches of characteristic mineral showings are given in Figs. II-2-5 and II-2-6.

The largest mineral showing in the area is B-14 (Sketch 4) located at upper stream of Sungai Karangan's tributary. Many quartz veins with pyrite and chalcopyrite occur in the dark greenish gray dolerite with weak disseminations of pyrite and chalcopyrite within the area of 6 m wide and 16 m long. The widths of quartz veins are, generally, around 10 cm with maximum of 70 cm. The quartz veins have variable amount of pyrite and chalcopyrite and they strike in N15°W with nearly vertical dip. The polished section reveals cubanite in addition to main constituent minerals of pyrite and chalcopyrite. Alteration mineral assemblages of chlorite-quartz-potash feldspar are shown by X-ray diffraction analysis. One of the 60 cm wide quartz vein with pyrite and chalcopyrirte gives 2.66 % Cu and 4.6 g/t Ag. The channel sample of 6 m wide collected cross over the mineral showing including wall rock and quartz veins show a low grade of 0.03 % Cu.

The mineral showing B-13 is located at approximately 150 m south of B-14. In B-13, four quartz veins with widthes ranging from 10 cm to 60 cm occur over the area of 40 m wide, hosted by the dark greenish gray dolerite. The alteration minerals of the host rock are mainly quartz and chlorite accosiated by potash feldspar and montmorillonite. The quartz veins are rich in pyrite and poor in chalcopyrite and, consequently, give low Cu grades.

B-10 (Sketct 2) and B-11 (Sketch 1) occur southwest of the B-13 and B-14 along the same tributaries of Sungai Karangan. The B-10 consists of 4 pyrite-quartz veins of 5 cm to 30 cm wide hosted by dark greenish gray, chloritized dolerite. A polished section from this showing shows predominant pyrite associated by chalcopyrite and sphalerite. The assay results show the maximum grade of 0.48 % Zn with low Cu. B-11 shows a dissemination of pyrite and chalcopyrite with quartz veinlet in brecciated dolerite at the extents of 10 m x 15 m. The sample collected from the zone of dissemination shows 0.41 % Cu, while the sample collected from sulfide rich quartz veins of 10 cm wide shows 31.2 g/t Ag, 10.10 % Cu and 2.02 % Zn.

A relatively large scale mineral showing (B-5) occur in southwestern part of the area. A scatterd occurrence of networks of pyrite and chalcopyrite veinlet over the area of 20 m x 5 m extents is observed in chloritized and silicified dolerite with weak pyrite disseminations. The samples collected from stockwork zones show 4.0 to 5.5 g/t Ag, 2.8 to 5.9 % Cu and 0.05 to 0.12 % Zn at the sampling widths of 10 to 20 cm. Mineral showings, similar to B-5, are B-1 and B-2 which occur for the southwest of B-5. The samples collected from these showings indicate 1.1 % Cu

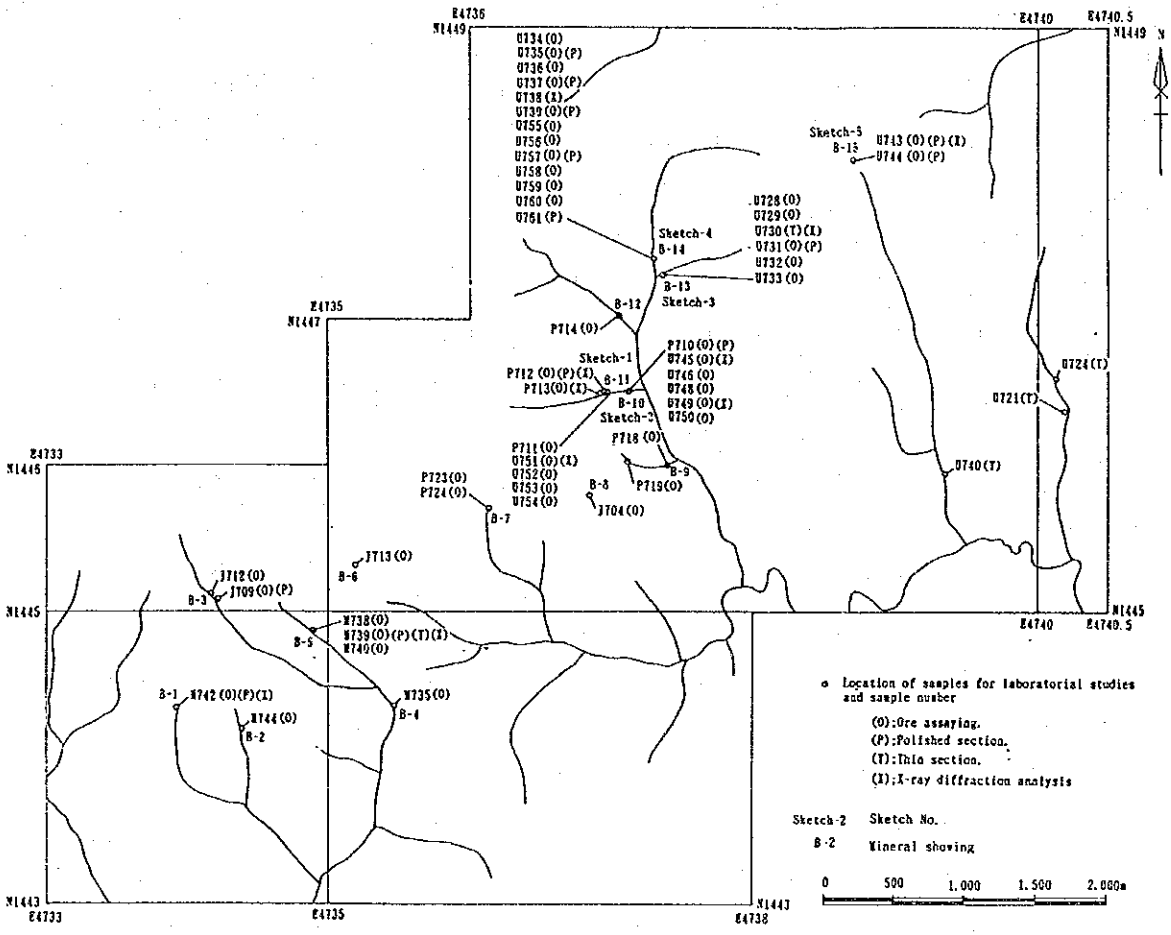


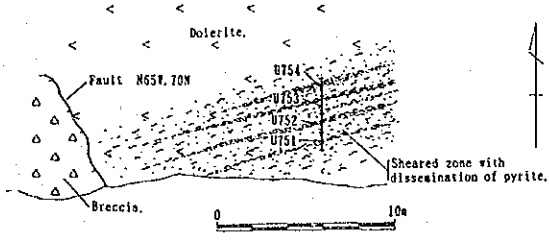
Fig. II-2-4 Locations of minerale showings and laboratorial work samples

Table II-2-5 Occurrences of mineralization in Area B (1)

Mineral Showing No.	Area	Description of Mineralization	Host rock	Alteration	Assay Results						
					Sample No.	Sampling width(m)	Au(g/t)	Ag(g/t)	Cu(ppm)	Zn(ppm)	S(%)
B-1	B	quartz veinlets with chalcopyrite and pyrite. vein width:1 ~3cm. mineralized zone:3m×3m.	dolerite.	chloritization argillization	M742	0.2	<0.1	0.9	11,603	53	12.72
B-2	B	dissemination of pyrite. mineralized zone:3m×5m.	dolerite.	silicification chloritization argillization	M744	0.2	<0.1	12.6	1,628	5,095	3.38
B-3	B	quartz vein with pyrite and chalcopyrite. vein width:30cm. N50W, 42N.	basalt.	chloritization	J709	0.3	<0.1	0.8	5,019	6,222	11.45
					J712	1.2	<0.1	0.5	5,104	69	6.22
B-4	B	quartz vein with pyrite and chalcopyrite. vein width:30cm. N80E, 85S.	dolerite.	chloritization	M735	0.3	<0.1	0.5	1,819	586	14.69
B-5	B	veinlets and dissemination of pyrite and chalcopyrite. mineralized zone:length20m, height5m	dolerite.	chloritization	M738	0.2	<0.1	4.0	28,017	981	7.56
					M739	0.1	<0.1	5.5	59,041	1,231	11.28
					M740	0.1	<0.1	4.2	37,207	546	7.36
B-6	B	dissemination of pyrite.	basalt.	chloritization	J713	0.2	<0.1	0.2	25	84	0.48
B-7	B	quartz stockwork vein with pyrite. mineralized zone:length15m, width2m	dolerite.	silicification chloritization	P723	0.2	<0.1	<0.1	204	65	22.41
					P724	0.2	<0.1	<0.1	63	60	19.25
B-8	B	dissemination of pyrite. (float:max20cm)	dolerite.	silicification chloritization	J704	0.2	<0.1	0.3	297	142	19.45
B-9	B	vein and dissemination of pyrite and chalcopyrite. N40E, 40S.	dolerite.	chloritization argillization	P718	0.1	<0.1	2.7	12,702	126	6.13
					P719	0.1	<0.1	1.9	8,525	173	10.93
B-10	B	quartz stockwork vein with pyrite. vein width:5 to 30cm, N20E, 80E. vein width:10 to 30cm, N45W, 90. (Sketch-2)	dolerite.		P710	0.2	<0.1	0.3	378	4,869	14.20
					U745	1.0	<0.1	<0.1	360	127	2.42
					U746	1.0	<0.1	<0.1	13	109	20.85
					U748	1.0	<0.1	0.2	44	539	6.24
					U749	0.15	<0.1	<0.1	11	163	3.51
					U750	0.3	<0.1	<0.1	64	72	0.33

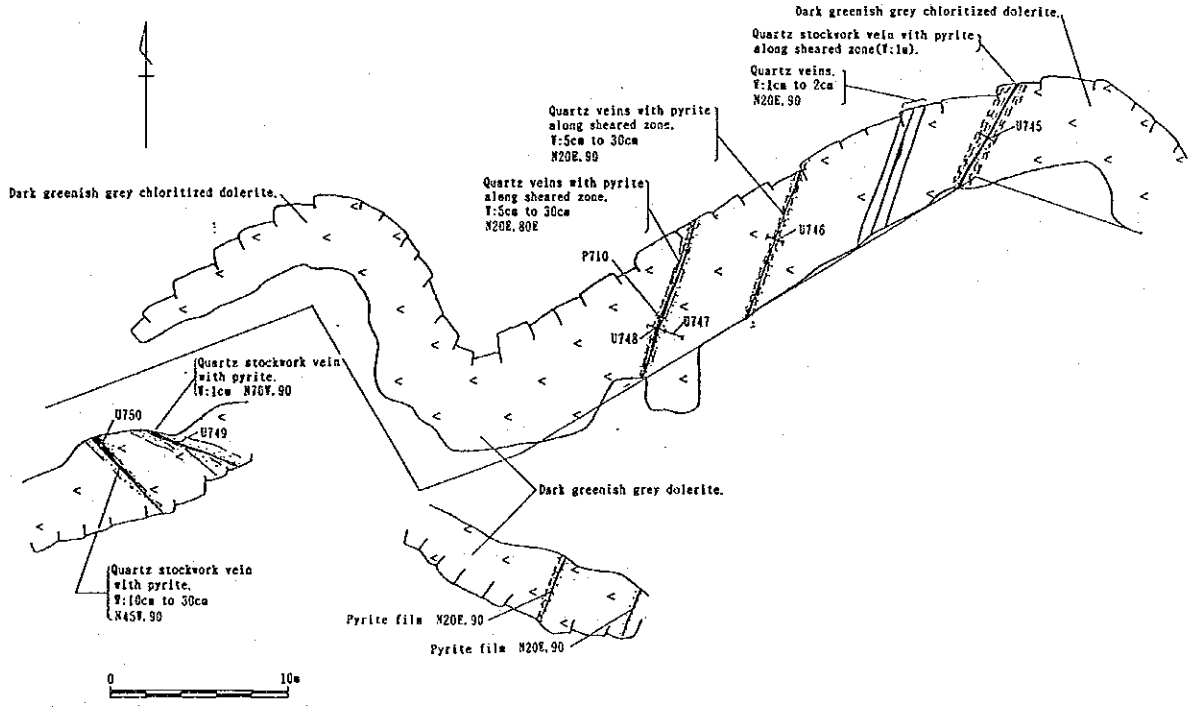
Table II-2-5 Occurrences of mineralization in Area B (2)

Mineral Showing No.	Area	Description of Mineralization	Host rock	Alteration	Assay Results						
					Sample No.	Sampling width(m)	Au(g/t)	Ag(g/t)	Cu(ppm)	Zn(ppm)	S(%)
B-11	B	dissemination of pyrite and quaretz vein with pyrite. mineralized zone:width10m, length15m, N85E, 72S. (Sketch-1)	dolerite.	chloritization	P711	0.2	<0.1	0.6	4,091	154	13.80
					P712	0.1	<0.1	31.2	101,016	20,240	21.52
					P713	0.1	<0.1	0.7	950	75	16.65
					U751	1.0	<0.1	0.3	581	494	4.09
					U752	1.0	<0.1	0.3	398	168	2.16
					U753	1.0	<0.1	0.1	249	360	4.78
					U754	1.0	<0.1	0.3	245	97	1.11
B-12	B	dissemination of pyrite.	dolerite.		P714	1.0	<0.1	0.4	528	115	8.86
B-13	B	quartz vein with pyrite. (Sketch-3) vein width:30cm, length:3m, NS, 70W. vein width:10cm, length:10m, N30E, 90. vein width:10cm, length:20m, N20E, 70N. vein width:60cm, length:20m, N20E, 70N.	dolerite.	chloritization	U728	0.3	<0.1	<0.1	23	109	15.46
					U729	0.1	<0.1	0.4	152	218	6.53
					U731	0.6	<0.1	<0.1	110	76	19.35
					U732	0.1	<0.1	0.3	31	291	10.56
					U733	0.3	<0.1	0.5	879	147	5.76
B-14	B	quartz vein and stockwork vein with pyrite and chalcopyrite. vein width:10cm, max70cm. N15W, 90. mineralized zone:width6m, length16m. (Sketch-4)	dolerite.	chloritization silicification	U734	1.0	<0.1	<0.1	374	213	14.85
					U735	1.0	<0.1	<0.1	61	69	18.30
					U736	0.7	<0.1	2.0	1,579	62	19.71
					U737	0.6	<0.1	4.6	26,642	300	21.92
					U739	0.03	<0.1	26.4	124,513	1,234	25.12
					U755	1.0	<0.1	0.2	518	181	3.90
					U756	1.0	<0.1	<0.1	328	100	12.87
					U757	1.0	<0.1	0.2	227	178	3.24
					U758	1.0	<0.1	0.3	29	158	2.99
					U759	1.0	<0.1	0.2	116	158	2.01
					U560	1.0	<0.1	0.4	325	160	4.57
B-15	B	quartz vein with pyrite. (Sketch-5) mineralized zone:1m×6m, N30W, 90.	dolerite.	silicification chloritization	U743	1.0	<0.1	0.5	775	1,094	21.74
					U744	0.1	<0.1	1.8	7,088	4,438	6.84



B - 11

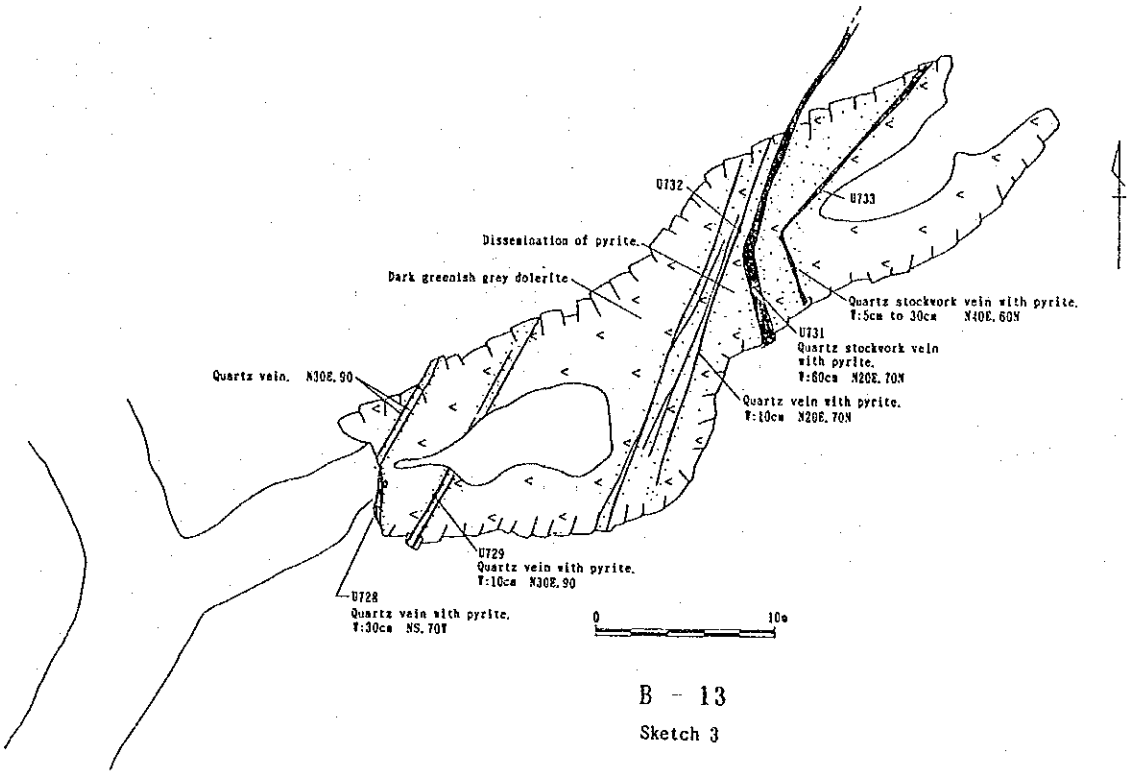
Sketch 1



B - 10

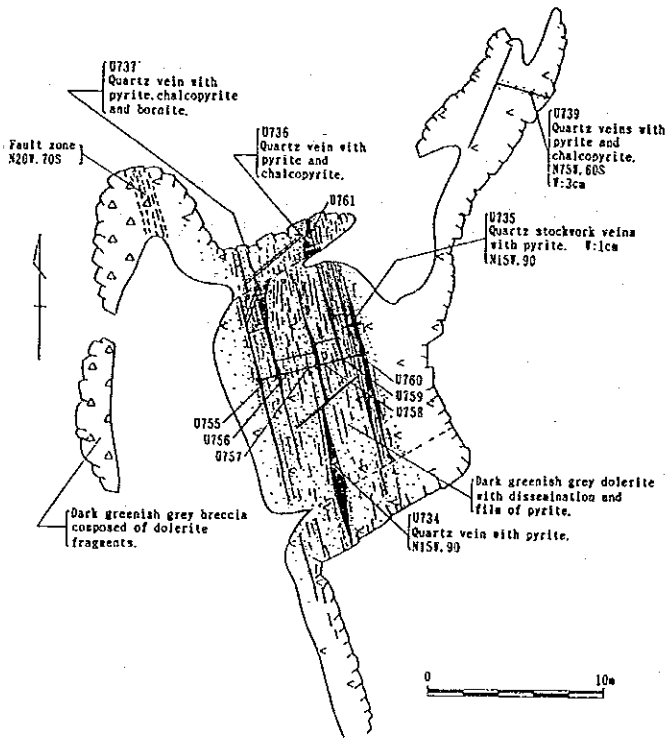
Sketch 2

Fig. II-2-5 Occurrences of mineralization (Sketch 1, 2)



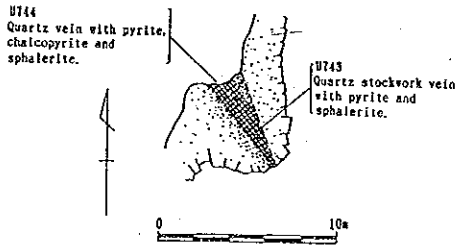
B - 13

Sketch 3



B - 14

Sketch 4



B - 15

Sketch 5

Fig. II-2-6 Occurrences of mineralization (Sketch 3, 4, 5)

and 0.1 % Cu with a width of 20 cm. The mineral showings of B-3 and B-4 are pyrite-chalcopyrite-quartz veins. Assay results of the 30 cm width veins from B-3 and B-4 show 0.5 % Cu and 0.2 % Cu respectively.

From the results of this survey, mineralized zones are confirmed in dolerite except B-3 and B-6 showings which occur in basaltic pillow lavas. The mineralized zones tend to occur in the vicinity of faults trending NW-SE and NNW-SSE directions. Mineral occurrences observed in the area are dissemination, stockwork and quartz vein with pyrite and chalcopyrite. The quartz veins in the B-14 showing form slightly large in scale mineralized zone. In some stockwork zones, concentrated zones of pyrite and chalcopyrite covers wider areas. Although the assay results for the whole mineralized zone show low copper grades, some parts within the mineralized zone indicate high Cu and Ag grades. As the ore minerals sphalerite and copper minerals including chalcopyrite, covelline, bornite and cubanite are recognized. The alteration minerals consist of chlorite, potash feldspar, albite and montmorillonite.

The mineralized zones confirmed in this survey are scattered and the scale of the mineralized zones are not clear. Further exploration work should be conducted to confirm the extensions of the mineralized zones.

Chapter 3 Overall discussion

3-1 Semi-detailed geochemical survey

Based on the results of the regional geochemical survey for the Kinabalu and Labuk areas in Phase III, ten (10) areas (Area J, K, L, M, N, P, Q, R, S and T) were selected as the potential areas of mineral resources. These promising areas were investigated by a semi-detailed geochemical survey in this phase. The results are summarized as follow;

(1) Area J

Results of the geochemical survey in Area J show low contents (maximum Au: 4 ppb, Cu: 133 ppm). Anomalous zones of the pathfinder elements including Au, Cu, Hg and Sb overlap in the area of alluvium at the west bank of Sungai Sugut in the western central part of this area. The threshold values of these elements are low compare to the results of other semi-detailed survey areas. No factor indicates the mineralization in the factor analyses. Judging from the survey results, the potential for mineral ore deposits is though to be low.

(2) Area K

Reddish brown laterite and yellowish green saprolite are found in the area of ultra-basic rocks in Area K. Three samples for assaying were colected from saprolite and the results were 0.50 %, 1.50 % and 1.44 % Ni.

Results of the geochemical survey show high contents of Ni and Fe. The samples collected at the depth of 50 cm show 8,636 ppm Ni and 47.01 % Fe as the maximum values. On the other hand, the samples from 150 cm in depth show 10,136 ppm Ni and 47.29 % Fe as the maximum values. The anomalous zones of Ni and Fe for the samples from 50 cm and 150 cm are found in the eastern, central and western parts of the area where ultra-basic rocks occurs.

Peridotite contains Ni ranging from 0.3 to 0.4 % in general. Therefore, enrichment of Ni and Fe occur in this area. Usually, maximum enrichment of Ni is found at the boundary between the laterite and basement rocks. As enrichment was recognized near surface, further suvey should be carried out at deeper part.

(3) Area L

From the results of the stream sediment geochemical survey, the maximum content of Ti is 12.40 % and the mean value is 0.83 %. During the regional survey

in Phase III a sample with 51.07 % Ti was confirmed in this area. But such significant value was not confirmed in this survey. Anomalous zones of Fe and Ti, which are overlapping each other, are found in the area of gabbro. Only one samples with more than 10 % Ti is found in this area. Good correlation is found between Fe and Ti. Both Fe and Ti show higher contents compare to the normal contents of these elements in Gabbro. Concentrations of Ti are expected in the gabbro. However, secondary enrichment of ilmenite are also expected in the stream of the sampling site of this survey. Overall the potential for titunium deposits in this area is thought to be low, because no significant concentrated zones were confirmed in this survey.

(4) Area M

From the results of the survey in Area M, the maximum values of Au and Cu are 57 ppb and 498 ppm respectively. The means of Cu is 10.7 ppm and is comparatively low. Anomalous zones of As, Au, Cu, Hg and S are centered along Sungai Sugut at the north eastern part of the area. Other than these anomalous zones, no significant anomalous zones are recognized. From the results of factor analysis, high factor score zones of the factor which possibly indicates mineralization are also found along Sungai Sugut. These anomalous and high factor score zones show close relationship with terrace deposits. Mineralized gravels supplied from Mamut copper deposit area may have some relation with these anomalous zones. No significant mineralized zone was confirmed in this area. Judging from these results, potential for mineral ore deposits in this area is thought to be low.

(5) Area N

Reddish brown lateritic soil develops in the area of ultra-basic rocks. Two samples were collected from strongly weathered ultra-basic rocks. The assay results for these samples show 0.80 % and 1.32 % of Ni.

Results of the soil geochemical survey show the maximum values of 13,114 ppm Ni and 46.17 % Fe in the case of the samples collected from 50 cm in depth, and 14,497 ppm Ni and 43.29 % Fe in the case of the samples from 150 cm in depth. Anomalous zones of Ni, Fe and Co from both the samples of 50 cm and 150 cm are found in the area of ultra-basic rocks at the central part of the area. Generally peridotite contains nickel ranging from 0.3 % to 0.4 %. As lateritic soil contains more than 0.5 %. in this survey, enrichment of Ni is recognized. The Ni contents in the samples from 150 cm are generally higher than the samples from 50 cm

in depth. Generally, enrichment of Ni occur at the boundary between lateritic soil and basement rocks. Since the enrichment of Ni is recognized in the depth, and the assay results show significant values of Ni, potential for nickel ore deposits is thought to be high. Further exploration work should be conducted for the deeper part of the area.

(6) Area P

As the results of this survey in Area P, the maximum of Cr was 10.73 % and the mean was 2.85 %. Anomalous zones of Cr are found from south western to north eastern part of the area where anomalous zones of Ni and Co are also recognized. In veiw of the high contents of Cr further exploration work should be carried out in the area of peridotite. However, the scale of the showing might be small, because no chromite floats were recognized during this survey.

(7) Area Q

From the results of the geochemical surveys in Area Q, the elements including Au, Co, Cr, Cu, Hg and Ni of soil and stream sediments show higher values compare to those from other semi-detailed survey areas. Anomalous zones of Au, Cu and Ni by soil and stream sediment surveys are found along Sungai Pinanduan in the central part of the area. Anomalous zones of Cr are found at the southern part of the area. From the results of a factor analysis, factors related to mineralization were confirmed in both the soil (Au-Cu) and stream sediments (Au-Cu-Hg). High factor score zones of these factors are found along Sungai Pinanduan. Exploration work for copper and nickel had been conducted in this area, but the results indicated no sufficient ore reserves. During this survey, potential for gold is also recognized. Further exploration work should be carried out to assess the potential.

(8) Area R

From the results of the survey in Area R, the pathfinder elements which possibly have direct relationship with mineralizaion show low values in both the soil and stream sediments surveys. Anomalous zones are concentrated in the eastern part of the area where ultra-basic rocks occurs. In case of soil geochemical survey, anomalous zones of Au, Cu and S overlap each other or are found in adjacent area. In case of stream sediment survey, anomalous zones of Cr, Cu, Hg, Ni and Zn mostly overlap each other. High factor score zones of the facter which may have

relationship with mineralization, are found at the eastern part of the area.

Contents of the pathfinder elements show low values and no mineralized and/or altered zones were confirmed in this survey. Judging from these facts, potential for copper and/or gold in this area is thought to be low.

(9) Area S

From the results of the survey in Area S, contents of pathfinder elements including As, Au, Cu, Hg, Pb and S show low values. The samples with comparatively high values of Cr and Ni are limited in the area of ultra-basic rocks. In the area of ultra-basic rocks, anomalous zones of As, Cu, Hg and Zn are found, but the threshold values themself are low values. No factors which have some relation with mineralization were obtained.

The pathfinder elements which directly indicate mineralization indicate low values. No significant mineralized and/or altered zones were recognized in this area. These facts may indicate low mineral potentiality in this area.

(10) Area T

In the survey for Area T, ore assaying was conducted for the mineralized samples and float gossan samples. Among these assay results, three samples indicate high grades of Au and Ag. These assay results are 9.0 g/t Au 278.3 g/t Ag, 18.4 g/t Au 115.7 g/t Ag and 15.4 g/t Au 931.4 g/t Ag. Observation results from polished section for these samples indicate ruby silver, freibergite and argentite as the silver minerals. Ratio of Au to Ag is low and the silver minerals occuring in the area are relatively low temperature type. These facts suggest that the mineralized zones in this area also indicate a possibility of being the upper part of porphyry copper type mineralization.

The contents of As, Au, Hg and S show higher values comparing to other semi-detailed survey areas. Anomalous zones of As, Au, Cu, Hg, S and Zn occur together in the southern part of the area. Other than this area, small anomalous zones are scattered. From the results of factor analyses, the factor which has relationship with mineralization was clearly delineated. The high factor score zones of this facter are concentrated in the area of the anomalous zones at the south. From the results of this survey, significant gold mineralization was confirmed in this area. Distribution of anomalous zones also suggest that the mineralized zones extend further south. Further exploration work must be carried out for these potential areas.

3-2 Geological survey

A detailed geological survey was carried out in Area B in the Segama area. Geology of this survey area consists of basic rocks of ophiolite series rocks which thrust over the Kuamut formation of Oligocene to middle Miocene age. The basic rocks consist of dolerite with subordinate layered gabbro. Basaltic pillow lavas are intercalated in the dolerite.

The mineralized zones are found in the area of dolerite and are scatterly aligned in a direction of NE-SW. Three types of mineralization including quartz vein, stockwork and disseminations of pyrite and chalcopyrite are recognized in this area. The most significant mineral showing was found at the central part. The width of the mineralized zone is approximately 6 m and quartz veins with pyrite and chalcopyrite occur in this zone. The width of the quartz veins range from several centimeters to one meter. The average grade is not high but some parts have good Cu grade (best sample; 0.60 m in width and 2.66 % Cu). Assay results of samples from stockwork and/or disseminated zones ranges from 2 to 10 % of Cu, but the widths are several tenth centimeters.

The mineralization confirmed in this survey is not typical Cyprus-type copper deposits, because the mineralization is vein and/or stockwork and is hosted by dolerite. The mineralized zones are scattered, but some parts show good Cu grades. It is better to carry out more detailed survey in order to clarify the potential.

Part III Conclusions and recommendations

Chapter 1 Conclusions

A semi-detailed geochemical survey for the selected ten areas was carried out in this phase. These ten areas are situated in the Kinabal and Labuk areas and are selected areas as potential areas of mineral resources in the regional survey of Phase Ⅲ. In addition, a geochemical survey was conducted for the mineralized zones in Area B in the Segama area. These mineralized zones were deliniated by the semi-detailed survey in Phase Ⅲ.

The results of the semi-detailed survey are conclusively summarized as follow:

Area J: Potential for copper ore deposit is thought to be low. The anomalous zones delineated by the regional geochemical survey possibly related to mineralized gravels in alluvium.

Area K: Concentration of nickel is recognized in the lateritic soil over ultra-basic rocks. Assay rsults give maximum value of 1.50 % Ni and the deeper part show higher concentration comparing the shallow part. Potential for lateritic nickel ore deposit is expected in this area.

Area L: No significant concentration of titanium minerals was confirmed in this area. potential fot titanium ore deposit is interpreted to be low.

Area M: Potential for porphyry copper deposit is thought to be low, as the geochemical anomalous zones are found in the area of terrace deposits which may contain mineralized gravels from the upper stream.

Area N: Comparing to Area K, higher concentration of nickel is recognized in the lateritic soil in this area. Potentiality for nickel ore deposits is thought to be high at the deeper parts.

Area P: Distribution of geochemical anomalous zones is limited. Potentiality of chromite ore deposit seems to be low.

Area Q: Consupicuous geochemical anomalous zones of Au, Cu and Ni were found and assay result of a gossan sample indicated 4.1 g/t Au. Mineralized zones are known in this area by the previous survey. Potential for gold and copper are thought to be high.

Area R: No significant geochemical anomalous zone and mineralized zone are confirmed in this area. Potential for copper ore deposit in this area is interpreted to be low.

Area S: Pathfinder elements indicate lower values comparing to other semi-detailed survey area and no mineralized zone was found during the survey. Potential for gold deposit is thought to be low.

Area T: Conspicuous geochemical anomalous zones and mineralized zones were confirmed in this area. Assay results give high grades of Au ranging from 9.4 g/t to 18.4 g/t and Ag ranging from 115.7 g/t to 931.4 g/t. Potentiality of this area is thought to be very high.

Among the ten areas investigated in this survey, it is possible to delineated Area K, Area N, Area Q and Area T as the potential areas of mineral resources in the Kinabal and Labk areas. The highest potentiality is expected for Area T among these four areas.

From the results of the geological survey in Area B, the mineralized zones occurs as veins, stockwork veins and disseminations of copper minerals. The mineralized zone does not indicate the occurrences of typical Cyprus-type copper deposit. The mineralized zones are scattered, but some parts show high copper grade ranging from 2 % to 10 %. The potential for copper ore deposit in this area is thought to be high.

Chapter 2 Recommendations for the future

The sample density of the semi-detailed geochemical survey is four samples per one square kilometer. Because of the limited number of samples, only the outline of the mineralized zones were confirmed in this survey. Further exploration work should be carried out for the geochemical anomalous zones and mineralized zones confirmed in this survey in order to clarify the potentiality. Based on the results of the semi-detailed survey and geological survey in Area B, following areas and the survey methods are recommended for the future exploration work:

① Area T in the southern margin of the Labuk area:
geological survey, trenching and geophysical survey (IP method)

② Area N at west of Telupid in the Labuk area:
geological survey, pit survey and trenching

③ Area Q along Sungai Karamuak in the Labuk area:
geological survey and geophysical survey (IP method)

④ Area B along Sungai Danum in the Segama area:
trenching

⑤ Area K east of Ranau in the Kinabalu area:
geological survey, pit survey and trenching

The target for Area T is gold mineralization. Area N and Area K are the potential areas of lateritic nickel ore deposits. Copper and/or gold mineralization is expected in Area Q. The target in Area B is copper ore deposit. These areas are shown in Fig. I-3. If these survey give attractive results, drilling survey should be conducted.

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Appendix 1

List of soil geochemical samples in Area J

Area: Middle Stream of S.Sugut (Area J)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
1	KJ001	1581.42	4660.57	Merungin	———	Q_2	30	B.	M	S	F	W	Grass
2	KJ002	1581.55	4661.05	Merungin	sandstone	P_2Cr	30	B.	M	S	M	W	Secondary forest
3	KJ003	1580.95	4660.48	Merungin	sandstone	P_2Cr	30	B.	M	S	F	W	Secondary forest
4	KJ004	1581.00	4661.00	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Grass
5	KJ005	1581.52	4661.50	Merungin	sandstone	P_2Cr	30	B.	R	S	M	W	Secondary forest
6	KJ006	1580.95	4661.68	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Secondary forest
7	KJ007	1581.42	4662.00	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Grass
8	KJ008	1581.04	4662.05	Merungin	sandstone	P_2Cr	30	B.	M	S	F	W	Secondary forest
9	KJ009	1581.37	4662.60	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Secondary forest
10	KJ010	1580.99	4662.47	Merungin	sandstone	P_2Cr	30	D.B.	M	S	M	W	Secondary forest
11	KJ011	1581.37	4663.00	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Secondary forest
12	KJ012	1580.92	4662.96	Merungin	sandstone	P_2Cr	30	Y.B.	R	S	F	W	Secondary forest
13	KJ013	1581.40	4663.42	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Secondary forest
14	KJ014	1581.53	4664.05	Merungin	sandstone	P_2Cr	30	Y.B.	R	S	F	W	Secondary forest
15	KJ015	1581.00	4664.00	Merungin	sandstone	P_2Cr	30	G.B.	R	S	F	W	Secondary forest
16	KJ016	1581.50	4664.45	Merungin	sandstone	P_2Cr	30	Y.B.	R	S	F	W	Secondary forest
17	KJ017	1581.00	4664.44	Merungin	sandstone	P_2Cr	30	Y.B.	R	S	F	W	Secondary forest
18	KJ018	1581.74	4665.00	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
19	KJ019	1581.38	4665.00	Merungin	sandstone	P_2Cr	30	Y.B.	R	C	M	W	Secondary forest
20	KJ020	1581.55	4665.49	Merungin	sandstone	P_2Cr	30	Y.B.	R	C	M	W	Secondary forest
21	KJ021	1581.65	4665.95	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
22	KJ022	1581.07	4666.02	Merungin	mudstone	P_2Cr	30	Y.B.	R	C	M	W	Secondary forest
23	KJ023	1581.46	4666.40	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
24	KJ024	1581.00	4666.55	Merungin	mudstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
25	KJ025	1581.75	4666.73	Merungin	mudstone	P_2Cr	30	Y.B.	R	C	M	W	Secondary forest
26	KJ026	1581.40	4666.68	Merungin	mudstone	P_2Cr	30	Y.B.	R	C	M	W	Secondary forest
27	KJ027	1581.40	4667.06	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
28	KJ028	1581.09	4667.10	Merungin	mudstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
29	KJ029	1581.47	4667.63	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Secondary forest
30	KJ030	1580.47	4660.48	Merungin	sandstone	P_2Cr	30	B.	R	S	M	W	Secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Middle Stream of S. Sugut (Area J)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
31	KJ031	1579.99	4660.55	Merungin	mudstone	P_2Cr	30	B.	R	C	M	W	Secondary forest
32	KJ032	1580.55	4660.92	Merungin	sandstone	P_2Cr	30	B.	F	S	M	W	Secondary forest
33	KJ033	1580.43	4661.57	Merungin	sandstone	P_2Cr	30	B.	F	S	M	W	Secondary forest
34	KJ034	1580.00	4661.52	Merungin	sandstone	P_2Cr	30	B.	R	C	M	W	Secondary forest
35	KJ035	1580.46	4661.99	Merungin	sandstone	P_2Cr	30	B.	M	S	M	W	Secondary forest
36	KJ036	1579.99	4662.01	Merungin	sandstone	P_2Cr	30	B.	M	S	F	W	Secondary forest
37	KJ037	1580.48	4662.52	Merungin	mudstone	P_2Cr	30	B.	F	C	M	W	Secondary forest
38	KJ038	1580.07	4662.47	Merungin	mudstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
39	KJ039	1580.55	4663.06	Merungin	mudstone	P_2Cr	30	B.	F	C	M	W	Secondary forest
40	KJ040	1580.07	4663.15	Merungin	mudstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
41	KJ041	1580.92	4663.43	Merungin	sandstone	P_2Cr	30	R.	R	S	F	W	Secondary forest
42	KJ042	1580.48	4663.53	Merungin	mudstone	P_2Cr	40	B.	R	C	M	W	Secondary forest
43	KJ043	1580.47	4664.05	Merungin	mudstone	P_2Cr	30	B.	R	C	F	W	Secondary forest
44	KJ044	1580.63	4664.55	Merungin	———	P_2Cr	40	B.	R	C	M	W	Secondary forest
45	KJ045	1580.18	4664.40	Merungin	mudstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
46	KJ046	1580.05	4664.85	Merungin	mudstone	P_2Cr	40	B.	R	C	M	W	Secondary forest
47	KJ047	1580.94	4664.99	Merungin	mudstone	P_2Cr	50	Y.B.	R	C	F	W	Secondary forest
48	KJ048	1580.42	4665.17	Merungin	———	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
49	KJ049	1580.94	4665.45	Merungin	———	P_2Cr	50	Y.B.	R	C	F	W	Secondary forest
50	KJ050	1580.42	4665.51	Merungin	sandstone	P_2Cr	30	Y.B.	R	C	M	W	Secondary forest
51	KJ051	1580.02	4665.58	Merungin	———	P_2Cr	40	D.B.	F	S	M	W	Secondary forest
52	KJ052	1580.42	4666.02	Merungin	———	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
53	KJ053	1580.02	4666.05	Merungin	———	P_2Cr	40	R.B.	F	S	M	W	Secondary forest
54	KJ054	1580.57	4666.57	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
55	KJ055	1580.00	4666.53	Merungin	———	P_2Cr	40	Y.B.	R	S	M	W	Secondary forest
56	KJ056	1580.46	4666.97	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
57	KJ057	1579.99	4667.01	Merungin	———	P_2Cr	40	Y.B.	R	S	M	W	Secondary forest
58	KJ058	1580.80	4667.53	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
59	KJ059	1579.43	4660.41	Merungin	sandstone	P_2Cr	30	B.	F	S	M	W	Secondary forest
60	KJ060	1579.04	4660.60	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Middle Stream of S. Sugut (Area J)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
61	KJ061	1579.95	4660.96	Merungin	sandstone	P_2Cr	30	B.	R	S	F	W	Secondary forest
62	KJ062	1579.54	4661.00	Merungin	———	P_2Cr	50	Y.B.	R	C	M	W	Secondary forest
63	KJ063	1579.08	4661.05	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
64	KJ064	1579.33	4661.32	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
65	KJ065	1579.55	4661.54	Merungin	sandstone	P_2Cr	30	Y.B.	R	C	F	W	Secondary forest
66	KJ066	1579.23	4661.72	Merungin	sandstone	P_2Cr	40	B.	F	C	M	W	Secondary forest
67	KJ067	1579.58	4661.96	Merungin	sandstone	P_2Cr	30	L.B.	R	C	F	W	Secondary forest
68	KJ068	1579.08	4662.15	Merungin	mudstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
69	KJ069	1579.62	4662.58	Merungin	sandstone	P_2Cr	40	B.	R	C	M	W	Secondary forest
70	KJ070	1579.08	4662.50	Merungin	———	Q_2	40	B.	F	C	F	W	Secondary forest
71	KJ071	1579.58	4663.03	Merungin	sandstone	P_2Cr	30	Y.B.	F	C	M	W	Secondary forest
72	KJ072	1579.01	4662.99	Merungin	sandstone	P_2Cr	40	R.B.	R	S	M	W	Secondary forest
73	KJ073	1579.91	4663.58	Merungin	mudstone	P_2Cr	50	Y.B.	R	C	M	W	Secondary forest
74	KJ074	1579.49	4663.56	Merungin	sandstone	P_2Cr	40	Y.	F	S	M	W	Secondary forest
75	KJ075	1579.01	4663.53	Merungin	———	P_2Cr	40	R.B.	R	S	M	W	Secondary forest
76	KJ076	1579.95	4663.97	Merungin	mudstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
77	KJ077	1579.58	4664.08	Merungin	mudstone	P_2Cr	40	B.	R	C	M	W	Secondary forest
78	KJ078	1579.00	4664.10	Merungin	sandstone	P_2Cr	40	D.B.	M	S	M	W	Secondary forest
79	KJ079	1579.50	4664.44	Merungin	sandstone	P_2Cr	40	D.B.	R	S	M	W	Secondary forest
80	KJ080	1579.00	4664.50	Merungin	———	P_2Cr	40	Y.B.	R	S	F	W	Secondary forest
81	KJ081	1579.25	4664.72	Merungin	———	P_2Cr	40	Y.	R	S	M	W	Secondary forest
82	KJ082	1579.57	4665.02	Merungin	sandstone	P_2Cr	40	R.B.	F	C	M	W	Secondary forest
83	KJ083	1579.00	4665.02	Merungin	sandstone	P_2Cr	40	Y.B.	R	S	M	W	Secondary forest
84	KJ084	1579.86	4665.25	Merungin	———	P_2Cr	40	R.B.	R	C	M	W	Secondary forest
85	KJ085	1579.20	4665.30	Merungin	———	P_2Cr	40	D.B.	R	S	F	W	Secondary forest
86	KJ086	1579.55	4665.52	Merungin	———	P_2Cr	40	R.B.	F	C	S	W	Secondary forest
87	KJ087	1579.01	4665.50	Merungin	———	P_2Cr	40	Y.	R	S	S	W	Secondary forest
88	KJ088	1579.57	4666.00	Merungin	———	P_2Cr	40	R.B.	R	F	S	W	Secondary forest
89	KJ089	1579.00	4666.00	Merungin	———	P_2Cr	40	Y.B.	R	S	F	W	Secondary forest
90	KJ090	1579.58	4666.49	Merungin	———	P_2Cr	40	Y.B.	R	F	M	W	Secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Middle Stream of S. Sugut (Area J)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
91	KJ091	1578.42	4660.47	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
92	KJ092	1578.40	4661.05	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
93	KJ093	1578.75	4661.27	Merungin	———	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
94	KJ094	1578.20	4661.35	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
95	KJ095	1578.93	4661.58	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
96	KJ096	1578.45	4661.59	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
97	KJ097	1578.05	4661.52	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	M	W	Secondary forest
98	KJ098	1578.87	4661.78	Merungin	———	P_2Cr	30	D.B.	R	C	M	W	Secondary forest
99	KJ099	1578.23	4661.82	Merungin	———	P_2Cr	40	Y.B.	F	C	F	W	Secondary forest
100	KJ100	1578.66	4661.95	Merungin	mudstone	P_2Cr	30	Y.B.	F	C	F	W	Secondary forest
101	KJ101	1578.08	4662.00	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
102	KJ102	1578.54	4662.50	Merungin	———	Q_2	40	B.	R	C	F	W	Secondary forest
103	KJ103	1577.95	4662.60	Merungin	———	Q_2	40	D.B.	R	S	F	W	Secondary forest
104	KJ104	1578.57	4663.00	Merungin	———	P_2Cr	40	R.B.	F	S	M	W	Secondary forest
105	KJ105	1578.00	4663.00	Merungin	———	P_2Cr	40	R.B.	F	C	M	W	Secondary forest
106	KJ106	1578.48	4663.47	Merungin	———	P_2Cr	40	Y.B.	R	S	F	W	Secondary forest
107	KJ107	1578.36	4664.01	Merungin	———	P_2Cr	40	Y.	R	S	F	W	Secondary forest
108	KJ108	1578.62	4664.43	Merungin	———	P_2Cr	40	Y.	R	S	F	W	Secondary forest
109	KJ109	1577.98	4664.43	Merungin	sandstone	P_2Cr	40	Y.B.	R	S	F	W	Secondary forest
110	KJ110	1578.77	4664.79	Merungin	sandstone	P_2Cr	40	Y.B.	F	S	M	W	Secondary forest
111	KJ111	1578.52	4664.99	Merungin	sandstone	P_2Cr	40	Y.B.	R	S	F	W	Secondary forest
112	KJ112	1577.98	4665.00	Merungin	———	P_2Cr	40	Y.B.	R	S	F	W	Secondary forest
113	KJ113	1578.36	4665.52	Merungin	———	P_2Cr	40	Y.	R	S	M	W	Secondary forest
114	KJ114	1577.92	4660.48	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
115	KJ115	1577.50	4660.51	Merungin	———	P_2Cr	30	B.G.	F	S	F	W	Secondary forest
116	KJ116	1577.01	4660.50	Merungin	sandstone	P_2Cr	30	B.	F	S	F	W	Secondary forest
117	KJ117	1577.88	4660.95	Merungin	———	P_2Cr	30	Y.B.	R	C	F	W	Secondary forest
118	KJ118	1577.43	4660.99	Merungin	———	P_2Cr	30	Y.B.	R	S	F	W	Secondary forest
119	KJ119	1577.02	4661.03	Merungin	sandstone	P_2Cr	30	B.G.	F	S	F	W	Secondary forest
120	KJ120	1577.73	4661.25	Merungin	sandstone	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Middle Stream of S. Sugut (Area J)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
121	KJ121	1577.25	4661.32	Merungin	sandstone	P_2Cr	30	Y.B.	F	S	F	W	Secondary forest
122	KJ122	1577.53	4661.53	Merungin	sandstone	P_2Cr	30	Y.B.	F	S	F	W	Secondary forest
123	KJ123	1576.98	4661.55	Merungin	———	P_2Cr	30	B.G.	F	S	F	W	Secondary forest
124	KJ124	1577.79	4661.73	Merungin	———	P_2Cr	40	Y.B.	R	C	F	W	Secondary forest
125	KJ125	1577.30	4661.78	Merungin	———	P_2Cr	30	B.G.	F	S	F	W	Secondary forest
126	KJ126	1577.57	4662.07	Merungin	———	Q_2	30	D.B.	R	C	F	W	Secondary forest
127	KJ127	1577.10	4662.02	Merungin	———	Q_2	30	B.	R	C	F	W	Secondary forest
128	KJ128	1577.43	4662.55	Merungin	———	Q_2	40	D.B.	R	C	F	W	Secondary forest
129	KJ129	1577.05	4662.50	Merungin	———	Q_2	30	L.B.	R	C	F	W	Secondary forest
130	KJ130	1577.57	4662.98	Merungin	———	P_2Cr	40	D.B.	R	S	F	W	Secondary forest
131	KJ131	1577.00	4662.92	Merungin	———	Q_2	40	Y.B.	R	S	F	W	Secondary forest
132	KJ132	1578.00	4663.45	Merungin	sandstone	P_2Cr	40	R.B.	R	S	M	W	Secondary forest
133	KJ133	1577.57	4663.50	Merungin	sandstone	P_2Cr	40	Y.B.	F	S	M	W	Secondary forest
134	KJ134	1577.97	4664.00	Merungin	———	P_2Cr	40	Y.B.	R	S	M	W	Secondary forest
135	KJ135	1577.57	4663.98	Merungin	sandstone	P_2Cr	40	R.B.	F	C	M	W	Secondary forest
136	KJ136	1576.99	4664.02	Merungin	sandstone	P_2Cr	40	R.B.	F	S	M	W	Secondary forest
137	KJ137	1577.56	4664.48	Merungin	sandstone	P_2Cr	40	R.B.	F	S	M	W	Secondary forest
138	KJ138	1577.00	4664.55	Merungin	sandstone	P_2Cr	40	Y.B.	F	S	M	W	Secondary forest
139	KJ139	1577.56	4665.02	Merungin	———	P_2Cr	40	R.B.	R	S	F	W	Secondary forest
140	KJ140	1576.54	4660.55	Merungin	———	P_2Cr	30	B.G.	R	S	F	W	Secondary forest
141	KJ141	1576.38	4661.00	Merungin	———	P_2Cr	30	B.G.	R	S	F	W	Secondary forest
142	KJ142	1576.76	4661.28	Merungin	———	P_2Cr	30	B.G.	F	S	F	W	Secondary forest
143	KJ143	1576.48	4661.53	Merungin	———	Q_2	30	B.G.	M	S	F	W	Secondary forest
144	KJ144	1576.73	4661.80	Merungin	———	Q_2	30	B.G.	M	C	F	W	Secondary forest
145	KJ145	1576.45	4662.02	Merungin	———	Q_2	30	B.G.	M	C	M	W	Secondary forest
146	KJ146	1576.28	4662.43	Merungin	———	Q_2	40	L.B.	R	C	F	W	Secondary forest
147	KJ147	1576.47	4662.98	Merungin	sandstone	P_2Cr	40	D.B.	M	S	M	W	Secondary forest
148	KJ148	1576.98	4663.53	Merungin	———	P_2Cr	40	D.B.	F	S	F	W	Secondary forest
149	KJ149	1576.62	4663.54	Merungin	sandstone	P_2Cr	40	R.B.	M	S	M	W	Secondary forest
150	KJ150	1576.60	4664.00	Merungin	sandstone	P_2Cr	40	R.Y.	F	S	M	W	Secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Appendix 2

Analytical results of soil geochemical samples in Area J

List of Geochemical Analysis(1)

Ser. No.	Sample No.	Location (km) X-coord	Location (km) Y-coord	As ppm	Au ppb	Ba ppm	Co ppm	Cr ppm	Cu ppm	Hg ppb	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	S %	Sb ppm	Sr ppm	Ti %	U ppm	W ppm	Zn ppm
1	KJ001	4660.570	1581.420	2	2	158	26	401	12	93	.59	.83	824	1>	.62	285	7	.023	2.9	37	.24	2.0	2>	123
2	KJ002	4661.050	1581.550	1>	1	180	7	36	12	55	.65	.46	584	1>	.24	16	16	.024	.2>	42	.33	2.8	2>	51
3	KJ003	4660.480	1580.950	1>	1>	83	4	166	9	65	.30	.20	100	1>	.08	44	12	.012	.2>	22	.25	1.8	2>	35
4	KJ004	4661.000	1581.000	1>	1>	196	11	56	19	56	1.05	.61	789	1>	.55	31	20	.018	.2>	54	.29	1.8	2>	59
5	KJ005	4661.500	1581.520	1>	1>	150	3	52	16	75	.94	.49	101	1>	.16	16	13	.013	.2>	27	.31	2.2	2>	42
6	KJ006	4661.680	1580.950	6	1>	99	1	51	9	63	.43	.29	97	1>	.07	14	9	.012	.2>	25	.30	2.0	2>	32
7	KJ007	4662.000	1581.420	1>	1>	97	2	77	9	72	.42	.27	40	1>	.09	44	11	.014	.2>	22	.27	2.2	2>	35
8	KJ008	4662.050	1581.040	1>	1>	121	7	84	8	55	.49	.34	413	1>	.15	28	11	.014	.2>	27	.27	2.0	2>	33
9	KJ009	4662.600	1581.370	1	1>	139	2	71	12	62	.73	.39	75	1>	.10	17	15	.014	.2>	30	.30	2.0	2>	38
10	KJ010	4662.470	1580.990	1>	1>	163	2	68	9	65	.47	.28	444	1>	.13	28	8	.016	.2>	31	.23	1.8	2>	29
11	KJ011	4663.000	1581.370	1>	1>	97	1>	40	7	62	.41	.25	33	1>	.08	6	14	.014	.2>	31	.30	1.8	2>	20
12	KJ012	4662.960	1580.920	1>	1>	100	1>	35	9	62	.48	.24	110	1>	.06	8	13	.012	.2>	26	.27	2.0	2>	24
13	KJ013	4663.420	1581.400	2	1	82	1>	40	8	92	.41	.26	28	1>	.08	6	3	.013	.2>	22	.30	2.0	2>	24
14	KJ014	4664.050	1581.530	4	1>	80	1>	37	6	80	.28	.18	23	1>	.06	6	11	.013	.2>	28	.29	2.2	2>	17
15	KJ015	4664.000	1581.000	6	1>	196	9	44	14	59	.89	.61	634	1>	.24	21	17	.018	1.0	42	.31	2.2	2>	49
16	KJ016	4664.450	1581.500	8	1>	118	3	42	11	46	.68	.34	124	1>	.10	18	5	.011	.2>	20	.28	2.2	2>	36
17	KJ017	4664.440	1581.000	2	1	98	1>	38	9	82	.51	.28	45	1>	.08	8	8	.016	.2>	21	.29	2.2	2>	25
18	KJ018	4665.000	1581.740	3	1>	179	1>	42	11	66	.65	.29	127	1	.13	12	4	.018	.2>	16	.29	2.0	2>	35
19	KJ019	4665.000	1581.380	9	1>	106	1>	43	7	51	.37	.26	26	1>	.12	7	15	.012	.2>	30	.29	2.2	2>	27
20	KJ020	4665.490	1581.550	1>	1	160	2	32	5	55	.48	.20	66	1>	.09	12	11	.017	.5	18	.24	1.4	2>	25
21	KJ021	4665.950	1581.650	6	2	141	1>	39	4	86	.55	.23	42	1>	.15	6	9	.015	.2>	17	.29	2.0	2>	15
22	KJ022	4666.020	1581.070	1>	1>	177	1	44	4	80	.58	.22	46	1>	.15	10	10	.022	.2>	15	.30	2.0	2>	20
23	KJ023	4666.400	1581.460	1>	1>	114	1>	78	10	106	.68	.27	41	1>	.19	16	9	.018	.2>	18	.31	2.2	2>	19
24	KJ024	4666.550	1581.000	1>	1	75	1>	34	4	65	.20	.18	25	1>	.10	5	7	.017	.2>	19	.23	1.8	2>	18
25	KJ025	4666.730	1581.750	1>	1>	135	1>	39	8	75	.38	.28	40	1>	.08	12	9	.023	.2>	27	.25	2.0	2>	35
26	KJ026	4666.680	1581.400	1>	1>	325	3	47	9	63	1.57	.42	68	1>	.34	21	19	.013	.2>	31	.34	2.2	2>	47
27	KJ027	4667.060	1581.400	4	1>	77	1>	47	3	80	.25	.15	22	1>	.13	5	6	.017	.6	16	.32	1.6	2>	10
28	KJ028	4667.100	1581.090	5	1>	72	1>	34	5	71	.26	.13	26	1>	.06	6	7	.011	.2>	16	.25	1.6	2>	9
29	KJ029	4667.630	1581.470	3	2	82	1>	98	5	85	.28	.17	28	1	.14	10	4	.013	.2>	17	.34	2.0	2>	14
30	KJ030	4660.480	1580.470	7	1	78	2	33	5	52	.33	.25	42	1>	.04	6	13	.013	2.5	23	.27	1.8	2>	21
31	KJ031	4660.550	1579.990	6	1>	192	5	72	17	104	1.04	.48	139	1>	.25	22	17	.020	.2>	53	.38	2.4	2>	56
32	KJ032	4660.920	1580.550	3	1>	156	4	51	12	74	.85	.52	162	1>	.14	14	9	.015	.2>	23	.32	2.4	2>	42
33	KJ033	4661.570	1580.430	2	1	227	7	85	21	70	1.59	.66	81	1>	.45	36	20	.019	.2>	60	.29	2.8	2>	70
34	KJ034	4661.520	1580.000	2	1>	144	6	51	11	83	.67	.34	304	1>	.25	22	14	.021	.4	47	.16	2.0	2>	46
35	KJ035	4661.990	1580.460	1>	1>	170	5	73	15	70	.98	.49	97	1>	.34	30	8	.019	.2>	50	.25	2.6	2>	53
36	KJ036	4662.010	1579.990	1>	4	274	9	87	24	54	1.86	.97	305	1>	.73	45	14	.020	.2>	67	.26	2.8	2>	80
37	KJ037	4662.520	1580.480	1>	1	220	10	82	20	68	1.19	.73	433	1>	.64	38	17	.025	.2>	67	.19	2.2	2>	73
38	KJ038	4662.470	1580.070	1>	1>	159	4	141	14	61	.75	.38	284	1>	.11	35	15	.017	1.0	26	.26	2.2	2>	35
39	KJ039	4663.060	1580.550	3	2	186	8	70	17	75	1.19	.62	210	1>	.55	33	16	.025	.2>	56	.16	2.4	2>	67
40	KJ040	4663.150	1580.070	1>	1>	83	1>	97	7	82	.47	.28	31	1>	.05	14	12	.016	.2>	23	.25	2.0	2>	22
41	KJ041	4663.430	1580.920	2	1>	75	1>	37	8	120	.35	.20	34	1>	.05	7	8	.013	.2>	19	.25	1.6	2>	15
42	KJ042	4663.530	1580.480	2	1>	191	7	37	15	53	.79	.47	918	1>	.32	18	8	.018	1.7	41	.29	2.0	2>	39
43	KJ043	4664.050	1580.470	1>	1>	128	3	91	12	76	.70	.42	65	1>	.11	25	13	.019	.2>	27	.31	1.8	2>	35
44	KJ044	4664.550	1580.630	1>	1>	113	4	55	12	52	.50	.31	103	1>	.07	13	12	.015	.2>	22	.26	1.8	2>	28
45	KJ045	4664.400	1580.180	4	1>	108	1>	40	9	63	.38	.27	40	1>	.07	10	14	.014	.7	17	.25	2.0	2>	30
46	KJ046	4664.850	1580.050	1>	1>	148	5	45	10	49	.60	.41	374	1>	.49	19	12	.020	.2>	42	.32	2.2	2>	31
47	KJ047	4664.990	1580.940	1>	1>	64	1>	137	6	93	.25	.18	38	1>	.07	30	13	.018	.2>	18	.22	2.0	2>	18
48	KJ048	4665.170	1580.420	2	1>	219	5	58	18	74	1.07	.60	242	1>	.16	23	18	.020	.2>	35	.34	2.6	2>	46
49	KJ049	4665.450	1580.940	1>	1>	90	1>	43	7	87	.47	.26	26	1>	.10	10	7	.017	.2>	29	.28	2.0	2>	16
50	KJ050	4665.510	1580.420	3	2	103	1	37	8	79	.32	.29	92	1	.08	11	13	.021	.2>	21	.23	1.8	2>	30

List of Geochemical Analysis(2)

Ser. No.	Sample No.	Location(km) X-coord	Location(km) Y-coord	As ppm	Au ppb	Ba ppm	Co ppm	Cr ppm	Cu ppm	Hg ppb	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	S %	Sb ppm	Sr ppm	Ti %	U ppm	W ppm	Zn ppm
51	KJ051	4665.580	1580.020	11	1>	156	7	37	15	78	.78	.48	558	1>	.26	19	14	.021	2.6	39	.25	1.8	2>	44
52	KJ052	4666.020	1580.420	5	1>	103	4	38	11	100	.55	.31	35	1>	.08	10	18	.015	5.2	22	.26	1.6	2>	26
53	KJ053	4666.050	1580.020	7	1>	180	5	66	19	81	1.25	.67	109	1>	.24	22	17	.015	4.2	40	.36	2.6	2>	55
54	KJ054	4666.570	1580.570	3	1>	117	4	39	9	78	.52	.35	57	1	.08	12	14	.016	3.1	20	.27	2.0	2>	31
55	KJ055	4666.530	1580.000	4	1>	70	2	27	7	80	.22	.19	58	1>	.03	8	14	.013	1.9	16	.22	1.6	2>	21
56	KJ056	4666.970	1580.460	1>	1>	114	7	38	9	78	.46	.33	92	1	.08	11	19	.014	4.7	21	.28	2.2	2>	27
57	KJ057	4667.010	1579.990	5	1	120	4	45	12	94	.67	.37	40	1>	.11	11	14	.018	5.9	27	.27	2.0	2>	32
58	KJ058	4667.530	1580.800	6	1	95	1>	44	8	94	.53	.28	22	1>	.08	7	13	.015	2.5	32	.31	1.8	2>	17
59	KJ059	4660.410	1579.430	3	1>	151	11	57	24	66	1.25	.75	423	1	.50	33	17	.020	5.5	35	.35	1.8	2>	61
60	KJ060	4660.600	1579.040	7	1>	113	4	45	10	91	.69	.39	94	2	.09	10	10	.014	6.1	28	.31	2.2	2>	33
61	KJ061	4660.960	1579.950	1>	2	153	12	49	13	78	.73	.42	785	1>	.34	22	18	.017	6.6	46	.32	2.0	2>	48
62	KJ062	4661.000	1579.540	11	1>	138	5	40	9	71	.63	.36	159	1	.09	10	16	.018	2.4	21	.30	2.0	2>	38
63	KJ063	4661.050	1579.080	3	1>	105	4	40	8	98	.53	.28	43	1>	.08	9	14	.015	1.4	23	.28	2.0	2>	25
64	KJ064	4661.320	1579.330	1	1>	101	2	41	7	90	.62	.29	49	1>	.08	8	17	.015	.2>	18	.29	2.0	2>	27
65	KJ065	4661.540	1579.550	10	1>	194	6	71	17	62	1.05	.47	126	1	.19	22	19	.020	3.8	55	.43	2.2	2>	59
66	KJ066	4661.720	1579.230	3	1>	181	12	50	16	72	1.08	.63	957	1>	.37	22	12	.025	4.2	46	.34	2.0	2>	49
67	KJ067	4661.960	1579.580	1>	1>	201	16	95	27	127	1.11	.72	466	1>	.32	55	14	.021	4.2	56	.32	2.2	2>	72
68	KJ068	4662.150	1579.080	10	1>	139	9	51	17	68	1.05	.60	344	1>	.35	21	12	.016	6.6	26	.31	2.2	2>	43
69	KJ069	4662.580	1579.620	7	1>	260	13	87	23	73	2.06	.94	393	2	.83	41	11	.019	6.2	72	.20	2.4	2>	82
70	KJ070	4662.500	1579.080	8	1>	249	13	200	11	70	.81	.57	498	1>	.57	146	12	.018	4.7	50	.24	1.6	2>	40
71	KJ071	4663.030	1579.580	13	1>	179	10	51	18	37	1.26	.66	351	1>	.32	24	18	.013	6.5	43	.32	2.0	2>	43
72	KJ072	4662.990	1579.010	2	1>	102	3	39	8	77	.52	.33	265	1>	.07	10	22	.018	4.0	23	.30	2.0	2>	33
73	KJ073	4663.580	1579.910	1>	1>	95	4	43	13	66	.58	.33	46	2	.10	13	14	.011	.2>	24	.26	2.4	2>	52
74	KJ074	4663.560	1579.490	8	1>	70	6	167	8	74	.24	.15	83	1>	.06	51	10	.012	4.5	11	.25	1.8	2>	23
75	KJ075	4663.530	1579.010	7	1>	162	4	46	9	75	.58	.41	128	1>	.11	13	18	.014	4.8	19	.30	2.2	2>	39
76	KJ076	4663.970	1579.950	7	1>	108	3	53	16	71	.66	.35	108	1	.08	33	15	.017	1.4	25	.30	2.4	2>	38
77	KJ077	4664.080	1579.580	1>	1	138	3	33	10	58	.58	.29	157	1>	.08	11	9	.015	1.2	32	.28	2.2	2>	38
78	KJ078	4664.100	1579.000	8	1>	124	9	53	10	48	.55	.37	324	1>	.18	20	8	.019	.2>	27	.22	2.0	2>	31
79	KJ079	4664.440	1579.500	1>	1>	239	19	221	16	80	.85	.78	569	1>	.68	194	14	.015	7.1	58	.25	1.8	2>	35
80	KJ080	4664.500	1579.000	7	1>	79	2	34	6	79	.35	.25	36	1>	.07	6	13	.016	1.7	16	.29	2.0	2>	28
81	KJ081	4664.720	1579.250	6	1>	80	3	41	8	78	.32	.28	111	1>	.11	9	7	.011	1.6	28	.26	2.0	2>	29
82	KJ082	4665.020	1579.570	5	1	234	17	79	30	53	2.31	1.09	431	1>	.29	37	29	.014	7.6	46	.42	3.2	2>	83
83	KJ083	4665.020	1579.000	2	1>	125	6	34	10	49	.60	.39	340	1>	.25	12	11	.013	6.4	28	.28	2.0	2>	35
84	KJ084	4665.250	1579.860	3	1>	156	5	53	17	77	1.05	.53	70	1	.13	19	7	.012	5.7	28	.30	2.0	2>	52
85	KJ085	4665.300	1579.200	4	1>	101	6	27	9	37	.51	.31	391	1>	.29	12	12	.012	1.2	26	.20	1.6	2>	26
86	KJ086	4665.520	1579.550	4	1>	212	13	47	20	61	1.09	.57	861	1>	.25	20	18	.015	5.5	36	.35	2.4	2>	52
87	KJ087	4665.500	1579.010	8	1>	117	8	49	14	86	.69	.43	107	1>	.12	15	14	.016	3.7	35	.31	2.2	2>	45
88	KJ088	4666.000	1579.570	8	1>	134	5	50	11	72	.67	.38	56	1>	.11	14	14	.016	3.0	30	.32	2.0	2>	38
89	KJ089	4666.000	1579.000	2	1>	82	3	38	5	84	.34	.26	55	1>	.08	8	14	.015	2.5	12	.33	2.4	2>	25
90	KJ090	4666.490	1579.580	5	1>	102	4	35	10	64	.46	.28	76	1>	.07	8	15	.015	1.5	23	.25	1.8	2>	32
91	KJ091	4660.470	1578.420	1>	1>	81	2	35	7	90	.35	.24	101	1>	.06	6	8	.019	4.6	26	.26	2.0	2>	24
92	KJ092	4661.050	1578.400	11	1>	168	9	56	15	74	1.05	.48	295	1	.20	20	16	.021	5.5	49	.35	2.2	2>	50
93	KJ093	4661.270	1578.750	1>	1	121	1>	44	9	91	.73	.34	53	1>	.09	6	19	.017	.2>	24	.29	2.2	2>	35
94	KJ094	4661.350	1578.200	1>	1	117	9	29	9	56	.39	.27	345	1>	.07	10	12	.014	3.5	32	.30	2.0	2>	27
95	KJ095	4661.580	1578.930	5	1>	111	1>	71	11	58	.73	.34	65	1>	.08	16	21	.017	2.0	24	.29	1.8	2>	30
96	KJ096	4661.590	1578.450	1>	1	90	5	49	9	56	.35	.15	236	1>	.05	12	8	.015	2.9	33	.25	1.8	2>	27
97	KJ097	4661.520	1578.050	9	1>	170	5	58	13	74	.85	.36	129	1>	.15	13	22	.018	1.3	46	.39	2.2	2>	47
98	KJ098	4661.780	1578.870	2	1>	110	85	335	96	145	.85	1.15	2925	4	1.62	121	2>	.024	13.1	48	1.37	.4	2>	238
99	KJ099	4661.820	1578.230	7	1>	288	17	82	35	89	2.02	.95	621	1	.63	47	17	.018	6.3	73	.45	2.8	2>	87
100	KJ100	4661.950	1578.660	1>	2	93	46	254	133	194	.45	2.11	2331	2	1.39	122	2>	.016	13.9	51	.88	.2	2>	148

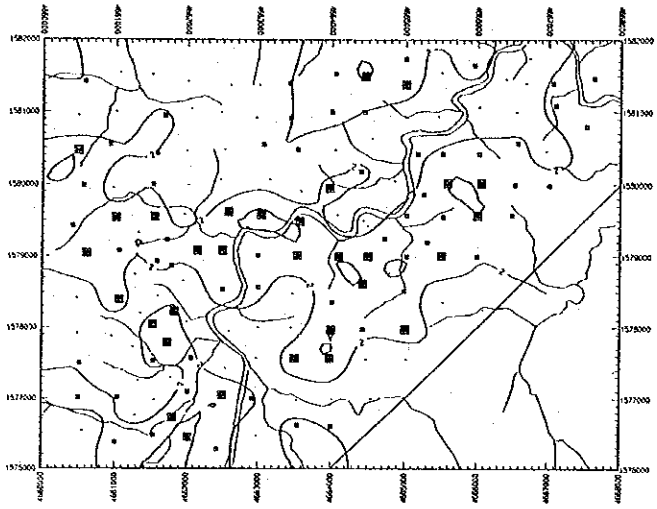
List of Geochemical Analysis(3)

Ser. No.	Sample No.	Location (km) X-coord	Location (km) Y-coord	As ppm	Au ppb	Ba ppm	Co ppm	Cr ppm	Cu ppm	Hg ppb	K %	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	Pb ppm	S %	Sb ppm	Sr ppm	Ti %	U ppm	W ppm	Zn ppm
101	KJ101	4662.000	1578.080	1>	4	226	6	53	28	97	1.74	.70	553	1	.27	22	15	.020	.5	54	.38	2.8	2>	67
102	KJ102	4662.500	1578.540	6	1>	132	17	97	16	96	.42	.25	944	1>	.12	39	19	.021	.2>	34	.34	1.8	2>	48
103	KJ103	4662.600	1577.950	1>	1>	247	24	272	18	90	.92	.87	753	1>	.66	169	9	.015	4.7	62	.25	2.0	2>	47
104	KJ104	4663.000	1578.570	4	1>	104	4	58	17	82	.60	.40	325	1	.07	25	17	.017	.6	22	.32	1.8	2>	36
105	KJ105	4663.000	1578.000	1	1>	83	2	38	11	66	.54	.32	78	1>	.05	11	14	.013	.2>	18	.24	1.8	2>	34
106	KJ106	4663.470	1578.480	1>	1>	106	2	44	10	66	.54	.35	38	1>	.06	7	15	.014	.6	28	.30	2.0	2>	35
107	KJ107	4664.010	1578.360	5	1>	92	1>	48	9	66	.51	.36	40	1>	.05	11	13	.013	.2>	20	.26	2.0	2>	33
108	KJ108	4664.430	1578.620	9	1	92	2	45	9	66	.55	.36	30	1>	.06	7	15	.013	4.6	26	.27	2.0	2>	28
109	KJ109	4664.430	1577.980	3	1>	79	4	30	5	58	.31	.28	37	1>	.08	10	8	.009	1.6	24	.22	1.8	2>	26
110	KJ110	4664.790	1578.770	1>	1>	126	4	39	12	80	.79	.51	188	1>	.17	17	10	.010	1.3	25	.26	2.2	2>	41
111	KJ111	4664.990	1578.520	6	1>	91	4	42	9	64	.37	.29	256	1>	.18	15	16	.012	.2	24	.21	2.0	2	28
112	KJ112	4665.000	1577.980	8	1	86	2	61	9	66	.39	.31	63	1>	.05	13	8	.017	3.8	20	.28	2.2	2>	34
113	KJ113	4665.520	1578.360	1>	1	89	2	49	6	59	.35	.23	102	1>	.05	10	14	.014	.8	10	.28	2.2	2>	28
114	KJ114	4660.480	1577.920	1>	1>	87	2	41	7	83	.37	.32	61	1>	.05	7	15	.013	.3	27	.32	1.8	2>	33
115	KJ115	4660.510	1577.500	2	1>	117	1>	44	9	62	.54	.41	45	1>	.06	12	13	.011	.6	27	.31	2.0	2>	34
116	KJ116	4660.500	1577.010	3	2	173	5	50	13	46	.95	.62	520	1>	.19	20	14	.018	.2>	45	.35	2.2	2>	49
117	KJ117	4660.950	1577.880	1>	1	100	1	41	10	66	.60	.37	57	1>	.07	9	13	.014	1.7	23	.28	2.0	2>	36
118	KJ118	4660.990	1577.430	1>	1>	114	4	44	8	68	.54	.36	157	1>	.06	15	20	.016	.2>	29	.28	2.0	2>	32
119	KJ119	4661.030	1577.020	3	1>	81	4	29	6	52	.25	.20	118	1>	.03	9	14	.015	.2>	21	.21	1.6	2>	23
120	KJ120	4661.250	1577.730	1>	1	62	1	33	5	89	.23	.20	39	1>	.03	5	13	.012	1.7	23	.23	1.8	2>	23
121	KJ121	4661.320	1577.250	1	1>	82	3	43	7	68	.36	.30	63	1>	.05	10	9	.009	.2>	25	.27	1.8	2>	29
122	KJ122	4661.530	1577.530	4	1>	98	2	44	8	68	.39	.24	139	1>	.06	11	19	.013	1.6	32	.30	2.0	2>	32
123	KJ123	4661.550	1576.980	1>	1>	134	9	56	27	60	1.04	.69	134	1>	.12	35	12	.010	.9	32	.42	2.0	2>	60
124	KJ124	4661.730	1577.790	9	2	67	3	39	7	61	.19	.14	69	1>	.03	13	13	.013	1.2	21	.22	2.0	2>	30
125	KJ125	4661.780	1577.300	1>	1>	26	1>	25	3	79	.08	.08	37	1>	.01	9	7	.007	.2>	15	.27	1.4	2>	15
126	KJ126	4662.070	1577.570	3	1>	183	6	45	13	128	.54	.41	463	1>	.38	23	10	.016	.3	37	.25	1.6	2>	36
127	KJ127	4662.020	1577.100	5	1>	246	11	49	19	91	.76	.53	651	1>	.51	31	22	.021	2.6	51	.28	1.8	2>	48
128	KJ128	4662.550	1577.430	1	1>	277	20	216	24	89	1.02	1.19	658	1>	.70	198	21	.021	6.7	65	.26	2.0	2>	54
129	KJ129	4662.500	1577.050	9	1>	243	15	224	25	98	.83	1.00	555	1>	.59	164	13	.020	2.5	56	.24	2.0	2>	56
130	KJ130	4662.980	1577.570	1>	1	142	4	49	12	61	.61	.43	327	1>	.22	26	17	.024	.2>	34	.25	2.0	2>	38
131	KJ131	4662.920	1577.000	3	1>	153	10	66	14	62	.51	.38	405	1>	.22	45	18	.013	.6	29	.25	1.8	2>	38
132	KJ132	4663.450	1578.000	1>	1>	109	1>	30	8	55	.50	.34	113	1>	.04	10	13	.010	1.0	25	.30	2.0	2>	32
133	KJ133	4663.500	1577.570	7	1	88	5	25	11	73	.49	.30	98	1>	.04	11	16	.009	2.0	22	.25	2.0	2>	29
134	KJ134	4664.000	1577.970	10	1>	82	1	24	7	79	.42	.27	53	1>	.04	7	15	.012	.2>	20	.28	1.8	2>	34
135	KJ135	4663.980	1577.570	10	1>	107	4	29	12	64	.63	.35	155	1>	.05	14	12	.014	.2>	27	.24	1.8	2>	38
136	KJ136	4664.020	1576.990	1	1>	95	3	32	8	62	.43	.28	309	1>	.03	10	13	.013	.2>	24	.26	1.8	2>	26
137	KJ137	4664.480	1577.560	1>	1>	112	1>	36	11	60	.72	.41	79	1>	.13	16	19	.011	.7	22	.29	2.0	2>	31
138	KJ138	4664.550	1577.000	1	1>	160	6	47	14	58	.87	.45	448	1>	.10	19	20	.013	1.4	29	.29	2.2	2>	42
139	KJ139	4665.020	1577.560	1>	1>	95	4	50	12	59	.46	.36	80	1>	.06	26	15	.012	.2>	21	.27	2.0	2>	37
140	KJ140	4660.550	1576.540	1>	1>	281	4	47	15	69	.79	.54	417	1>	.13	19	26	.017	.2>	31	.29	2.4	2>	44
141	KJ141	4661.000	1576.380	4	1>	78	2	32	6	61	.35	.25	74	1>	.04	9	19	.010	1.8	20	.22	1.8	2>	30
142	KJ142	4661.280	1576.760	1>	1>	82	3	19	4	43	.12	.11	397	1>	.05	10	8	.011	.2>	20	.19	1.6	2>	18
143	KJ143	4661.530	1576.480	6	1>	114	4	30	11	57	.61	.42	250	1>	.08	18	20	.016	1.1	28	.30	2.4	2>	37
144	KJ144	4661.800	1576.730	7	2	187	16	180	13	67	.53	.42	474	1>	.34	166	9	.014	.9	33	.28	2.2	2>	40
145	KJ145	4662.020	1576.450	9	1	261	28	240	22	144	.88	.90	782	1>	.52	324	17	.012	1.9	43	.31	2.0	2>	54
146	KJ146	4662.430	1576.280	4	1>	294	23	240	22	91	.97	.78	815	1>	.58	204	17	.015	4.4	50	.31	2.0	2>	57
147	KJ147	4662.980	1576.470	1>	1>	129	11	98	25	62	.41	.38	781	1>	.09	46	18	.018	2.0	23	.52	2.2	2>	39
148	KJ148	4663.530	1576.980	1>	1>	145	7	39	11	48	.59	.39	285	1>	.29	23	17	.013	1.2	28	.23	1.6	2>	35
149	KJ149	4663.540	1576.620	4	1>	99	23	97	26	81	.50	.33	958	1>	.04	38	21	.014	3.8	17	.38	1.8	2>	37
150	KJ150	4664.000	1576.600	2	1	131	1>	75	18	42	.97	.51	129	5	.10	29	30	.009	4.1	21	.33	2.6	2>	45

Appendix 3

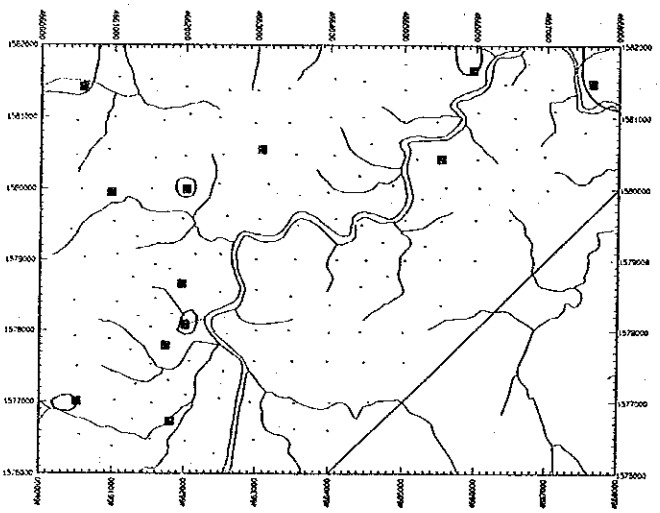
Distribution map of elements in Area J

Soil



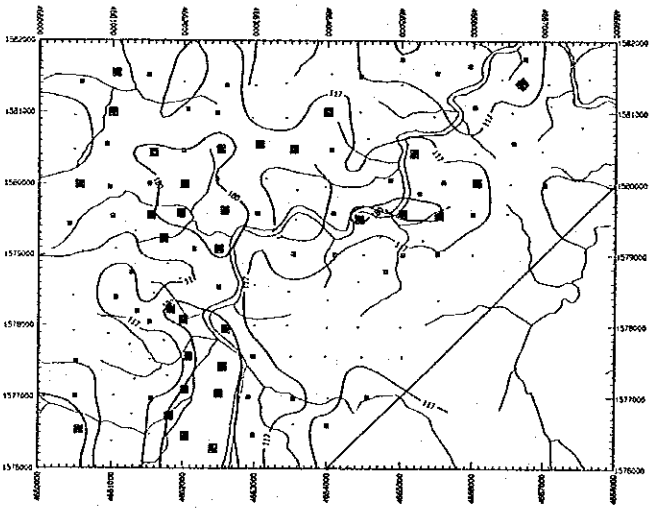
As

7.000
2.000



Au

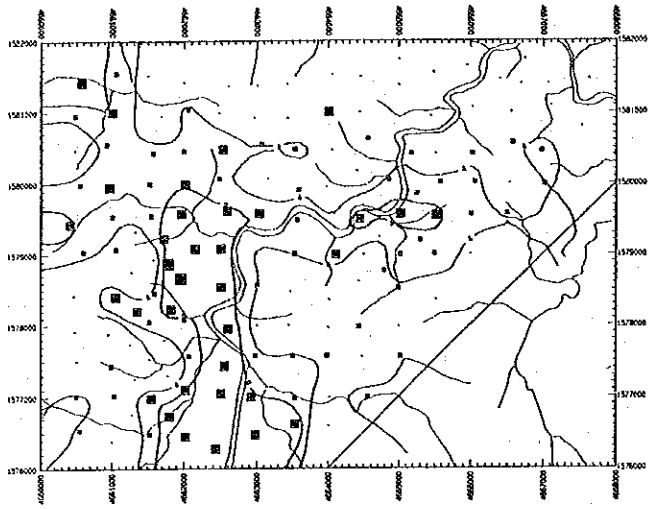
1.578



Ba

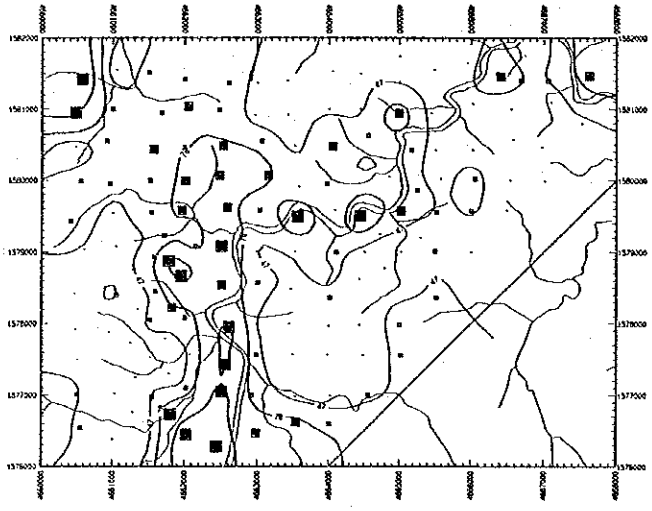
180.000
117.000

Soil



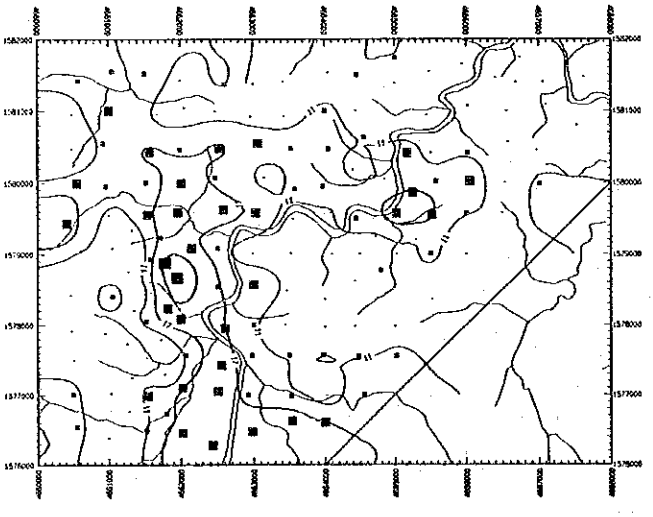
Co

46.000
9.000
4.000



Cr

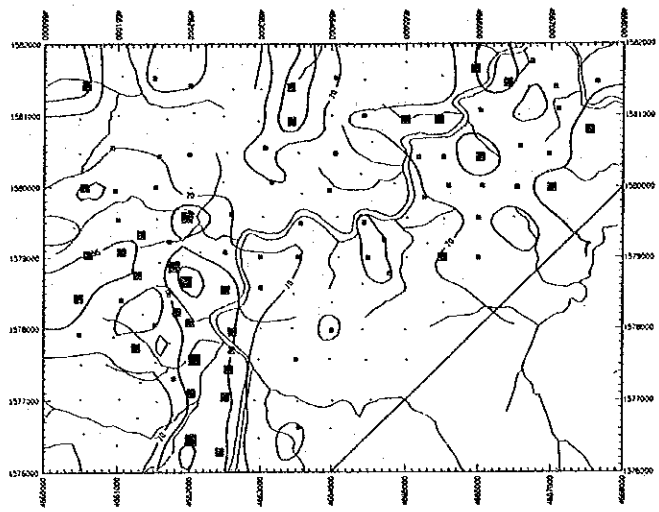
153.000
78.000
47.000



Cu

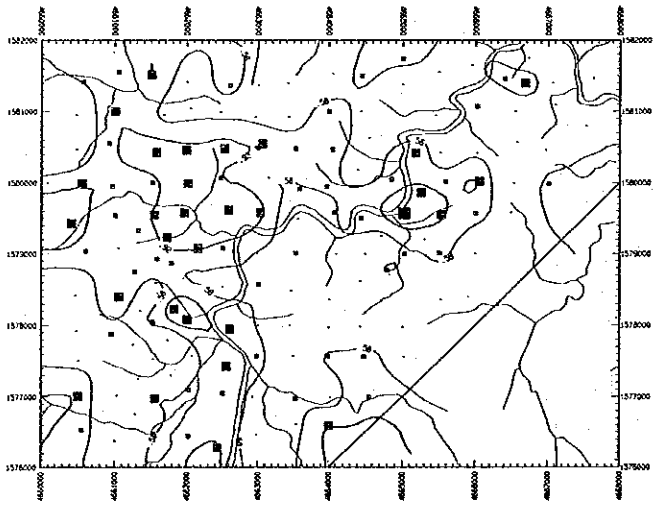
39.000
17.000
11.000

Soil



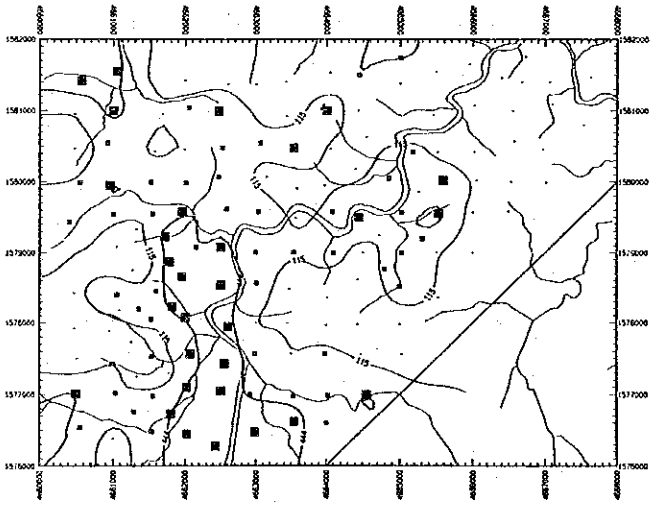
Hg

124.000
66.000
70.000



K

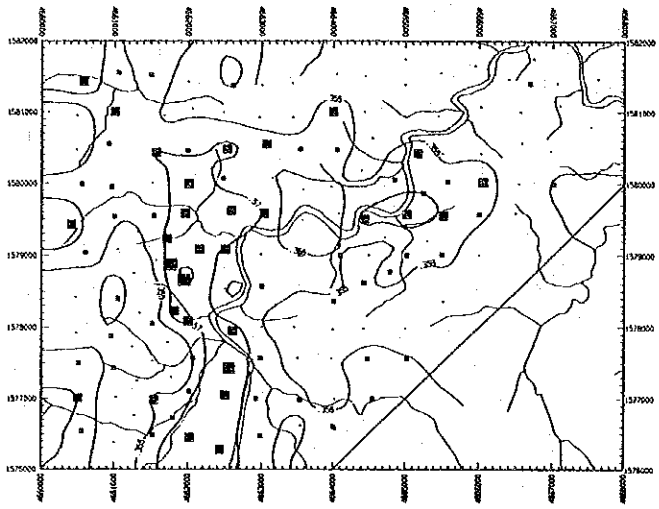
2.249
.920
.580



Mn

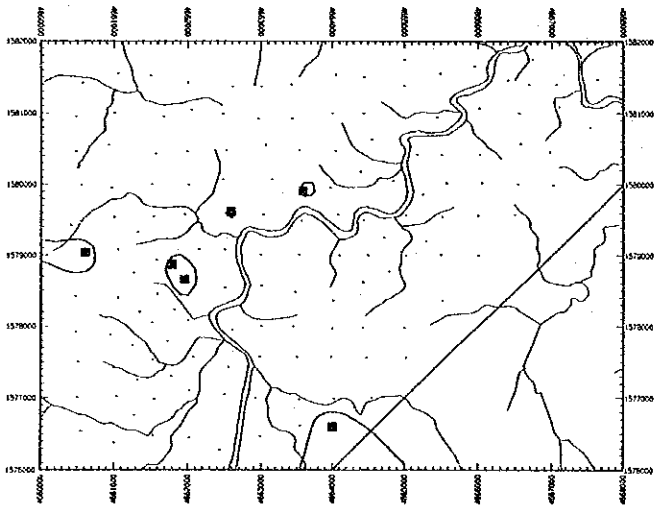
444.000
115.000

Soil



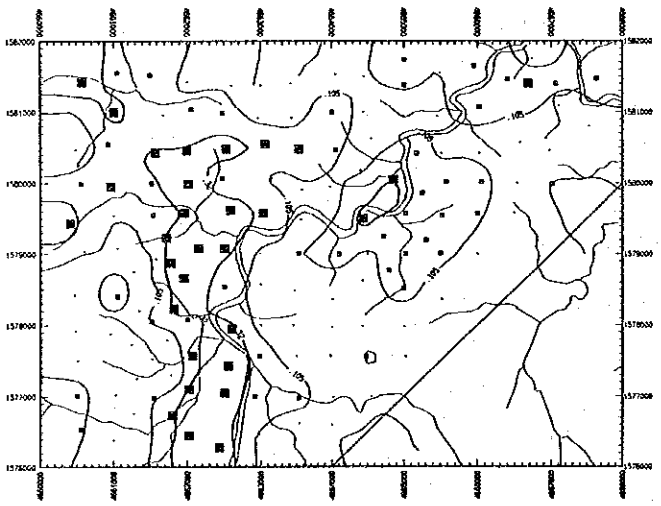
Mg

1.130
.570
.355



Mo

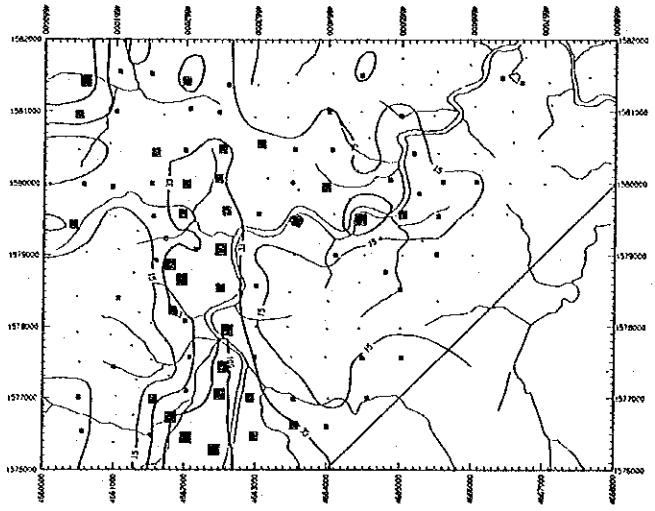
1.218



Na

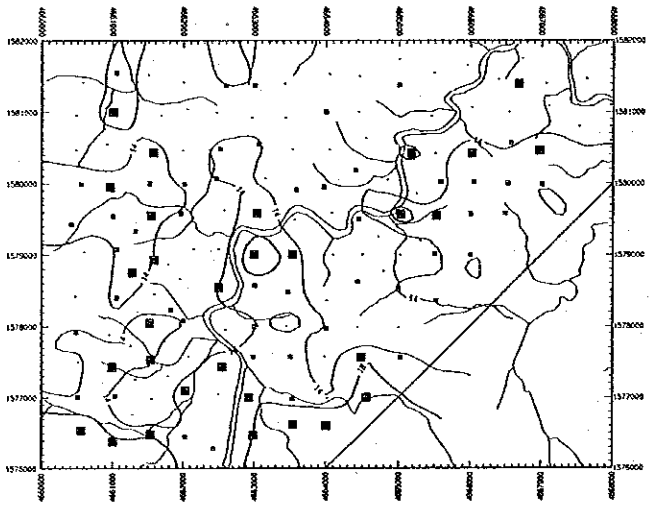
.320
.105

Soil



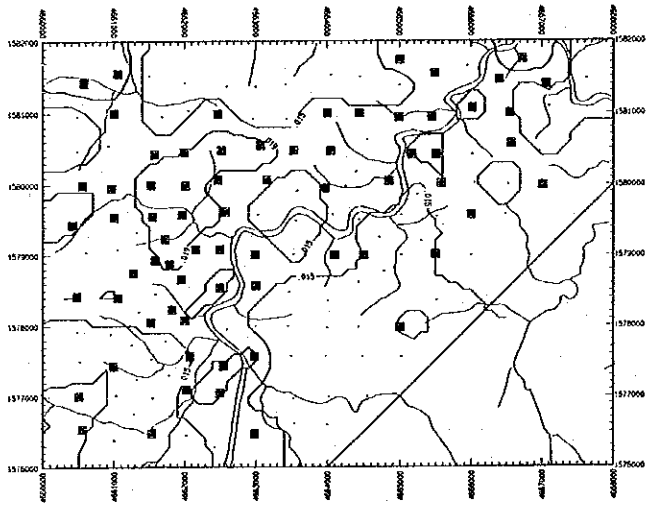
Ni

109.000
33.000
15.000



Pb

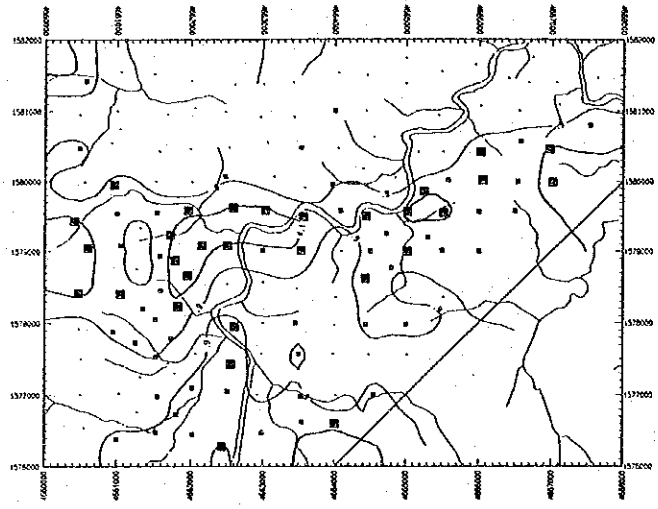
18.000
14.000



S

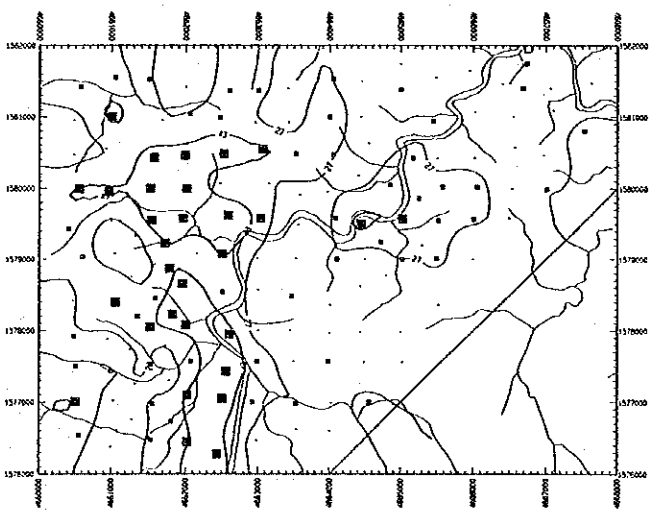
.019
.015

Soil



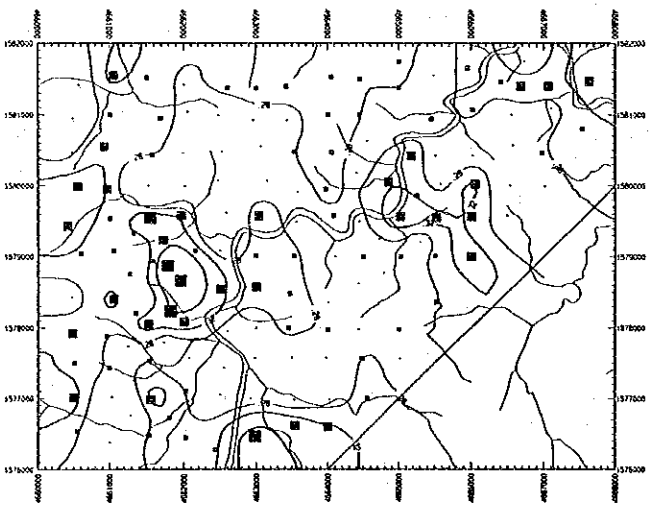
Sb

4.100
.900



Sr

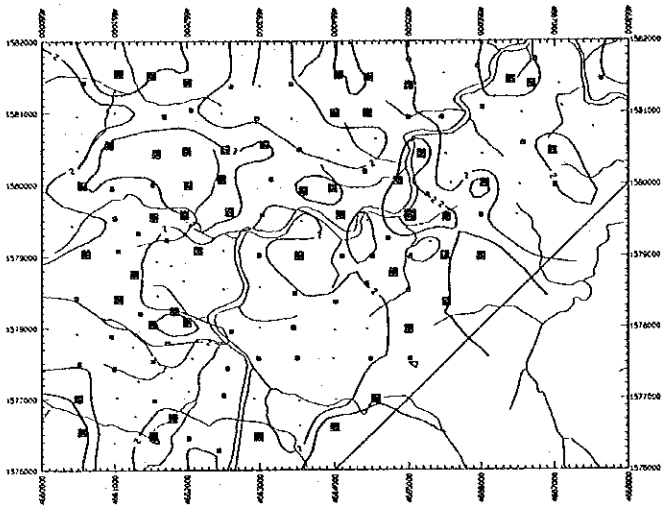
43.000
27.000



Ti

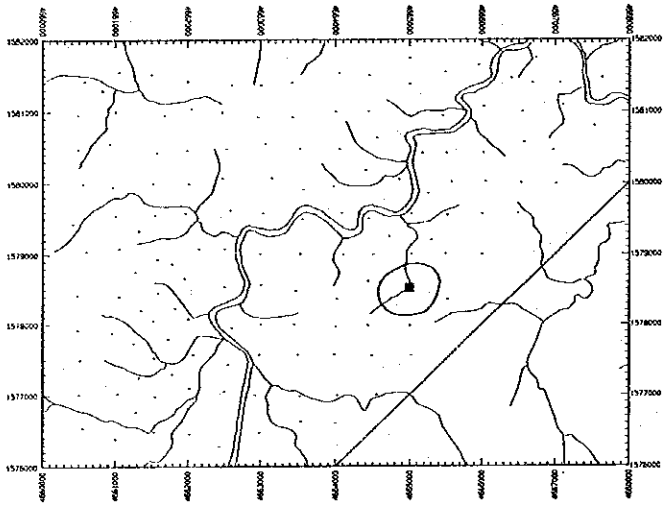
.428
.320
.280

Soil



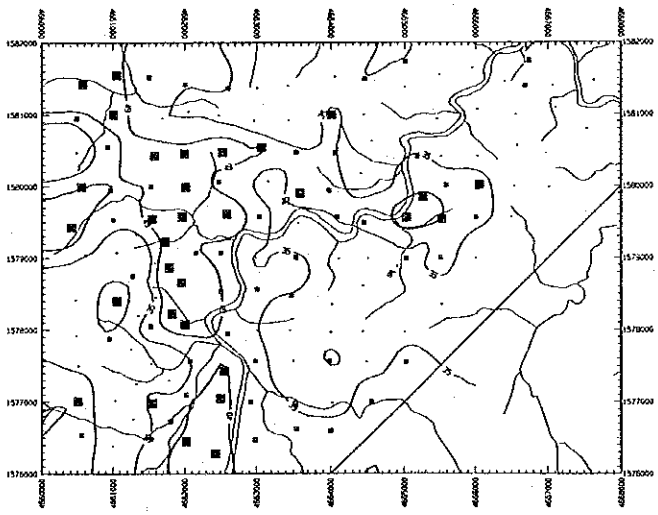
U

2.973
2.200
2.000



W

1.125



Zn

49.000
35.000

Appendix 4

List of soil geochemical samples in Area K

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 / 100 / 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
1	KK001	1562.50	4639.43	Perido. boulder	Pr	B	50	B.	A B	R	C	F	W	pri.forest
2	KK002	1562.00	4639.45	———	Pr	B	50	D.B.	B	F	C	S	W	pri.forest
3	KK003	1562.50	4640.05	———	Pr	C	50	D.B.	A B C	F	C	S	W	pri.forest
4	KK004	1562.00	4640.09	———	Pr	B	50	B.	B	R	C	S	W	sec.forest
5	KK005	1562.48	4640.53	———	Pr	B	50	B.	A B	R	C	F	W	sec.forest
6	KK006	1562.79	4641.02	———	Pr	B	50	B.	B	R	C	S	W	sec.forest
7	KK007	1562.35	4641.02	———	Pr	B	50	B.	A B	R	C	F	W	sec.forest
8	KK008	1561.99	4641.00	———	Pr	B	50	B.	B	R	C	F	W	sec.forest
9	KK009	1562.69	4641.45	———	Pr	B	50	B.	B	R	C	M	W	sec.forest
10	KK010	1562.30	4641.50	———	Pr	B	50	B.	B	R	C	S	W	sec.forest
11	KK011	1562.00	4641.50	———	Pr	B	50	B.	A B	R	C	F	W	sec.forest
12	KK012	1562.75	4642.02	Perido. boulder	Pr	B	50	Gr.G.	A B	M	C	M	W	sec.forest
13	KK013	1562.30	4641.92	———	Pr	B	50	B.	B	F	C	F	W	sec.forest
14	KK014	1562.00	4642.00	———	Pr	B	50	B.	B	R	C	M	W	sec.forest
15	KK015	1562.77	4642.49	Perido. boulder	Pr	C	50	Gr.G.	A B C	M	C	M	W	sec.forest
16	KK016	1562.48	4642.55	Perido. boulder	Pr	B	50	Gr.G.	A B	M	C	M	W	sec.forest
17	KK017	1562.75	4639.75	———	Pr	B	50	B.	A B	R	C	F	W	pri.forest
18	KK018	1562.20	4642.50	———	Pr	B	50	B.	A B	R	C	M	W	sec.forest
19	KK019	1562.75	4640.33	———	Pr	B	50	B.	B	R	C	F	W	pri.forest
20	KK020	1562.25	4639.75	———	Pr	C	50	D.B.	A B C	M	C	S	W	pri.forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
21	KK021	1562.23	4640.30	———	Pr	C	50	D.B.	A B C	M	C	F	W	sec. forest
22	KK022	1562.25	4640.74	———	Pr	B	50	B.	A B	R	C	F	W	sec. forest
23	KK023	1561.68	4639.65	———	Pr	B	50	B.	B	F	C	S	W	sec. forest
24	KK024	1561.73	4640.26	———	Pr	B	50	B.	B	R	C	F	W	sec. forest
25	KK025	1561.70	4640.72	———	Pr	B	50	B.	B	R	C	M	W	sec. forest
26	KK026	1561.75	4641.27	———	Pr	B	50	B.	A B	R	C	M	W	sec. forest
27	KK027	1561.70	4641.72	———	Pr	B	50	B.	A B	R	C	M	W	sec. forest
28	KK028	1561.70	4642.25	———	Pr	B	50	B.	A B	R	C	S	W	sec. forest
29	KK029	1561.23	4639.70	———	Pr	B	50	R.B.	A B	R	C	S	W	sec. forest
30	KK030	1561.38	4645.14	———	Pr	B	50	D.B.	A B	R	C	S	W	sec. forest
31	KK031	1561.29	4644.35	harzburgite	Pr	B	50	B.	A B	R	C	S	W	sec. forest
32	KK032	1561.40	4644.75	———	Pr	B	50	B.	B	R	C	S	W	sec. forest
33	KK033	1561.45	4639.45	———	Pr	B	50	B.	B	F	C	S	W	sec. forest
34	KK034	1561.47	4640.10	———	Pr	B	50	B.	B	R	C	S	W	sec. forest
35	KK035	1561.94	4640.45	———	Pr	B	50	B.	B	R	C	F	W	sec. forest
36	KK036	1561.42	4640.42	———	Pr	B	50	B.	B	R	C	M	W	sec. forest
37	KK037	1561.00	4640.45	———	Pr	B	50	R.B.	B	R	C	S	W	sec. forest
38	KK038	1561.40	4641.00	———	Pr	B	50	B.	B	R	C	S	W	sec. forest
39	KK039	1560.99	4640.99	———	Pr	B	50	R.B.	B	R	C	S	W	sec. forest
40	KK040	1561.42	4641.50	———	Pr	B	50	B.	B	R	C	M	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 / 100 / 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
41	KK041	1561.48	4642.00	———	Pr	B	50	B.	B	R	C	S	W	sec. forest
42	KK042	1561.24	4642.30	———	Pr	B	50	B.	B	R	C	F	W	sec. forest
43	KK043	1561.99	4642.48	———	Pr	B	50	B.	A B	R	C	S	W	sec. forest
44	KK044	1561.55	4642.58	———	Pr	B	50	D.B.	B	R	C	S	W	sec. forest
45	KK045	1561.00	4642.19	———	Pr	B	50	R.B.	A B	R	C	F	W	sec. forest
46	KK046	1561.28	4642.72	———	Pr	B	50	R.B.	A B	F	C	M	W	sec. forest
47	KK047	1560.69	4642.02	dunite	Pr	B	50	R.B.	B	R	C	F	W	sec. forest
48	KK048	1561.45	4643.02	dunite	Pr	B	50	B.	B	R	C	M	W	sec. forest
49	KK049	1561.07	4643.07	———	Pr	B	50	B.	B	F	C	M	W	sec. forest
50	KK050	1561.27	4643.22	———	Pr	B	50	B.	B	F	C	S	W	sec. forest
51	KK051	1562.15	4642.28	———	Pr	B	50	R.B.	B	F	C	M	W	sec. forest
52	KK052	1561.38	4643.52	———	Pr	B	50	D.B.	A B	R	C	S	W	sec. forest
53	KK053	1561.03	4643.51	———	Pr	B	50	D.B.	B	F	C	S	W	sec. forest
54	KK054	1561.22	4643.79	———	Pr	B	50	B.	B	F	C	S	W	sec. forest
55	KK055	1561.20	4640.23	———	Pr	B	50	R.B.	B	R	C	S	W	sec. forest
56	KK056	1561.36	4644.08	harzburgite	Pr	B	50	D.B.	B	R	C	F	W	sec. forest
57	KK057	1561.52	4644.52	harzburgite	Pr	B	50	R.B.	B	R	C	M	W	sec. forest
58	KK058	1561.08	4644.43	———	Pr	B	50	B.	A B	F	C	F	W	sec. forest
59	KK059	1561.55	4644.98	———	Pr	B	50	B.	B	R	C	F	W	sec. forest
60	KK060	1561.25	4644.98	———	Pr	B	50	R.B.	A B	R	C	F	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy(S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
61	KK061	1561.23	4640.73	——	Pr	B	50	D.B.	B	R	C	S	W	sec. forest
62	KK062	1561.52	4645.32	——	Pr	B	50	D.B.	A B	R	C	M	W	sec. forest
63	KK063	1561.23	4645.34	sandstone boulder	P_2Cr	B	50	L.B.	B	R	S	S	W	sec. forest
64	KK064	1561.20	4641.26	——	Pr	B	50	D.B.	A B	R	C	S	W	sec. forest
65	KK065	1561.53	4645.64	——	P_2Cr	B	50	L.B.	B	R	C	F	W	sec. forest
66	KK066	1561.23	4641.74	——	Pr	B	50	D.B.	A B	F	C	M	W	sec. forest
67	KK067	1560.13	4644.75	——	Pr	B	50	B.	A B	R	C	F	W	sec. forest
68	KK068	1560.15	4645.28	sandstone	P_2Cr	B	50	Y.B.	A B	R	C	F	W	sec. forest
69	KK069	1560.89	4639.53	——	P_2Cr	B	50	Y.B.	A B	R	S	S	W	sec. forest
70	KK070	1560.55	4639.50	——	P_2Cr	B	50	Y.B.	A B	R	S	M	W	sec. forest
71	KK071	1560.94	4639.89	——	Pr	C	50	L.B.	B C	M	C	S	W	sec. forest
72	KK072	1560.47	4639.99	——	P_2Cr	B	50	L.B.	A B	R	S	M	W	sec. forest
73	KK073	1560.30	4640.50	——	P_2Cr	B	50	L.B.	A B	R	C	M	W	sec. forest
74	KK074	1560.54	4641.22	——	Pr	B	50	L.B.	A B	F	S	M	W	sec. forest
75	KK075	1560.92	4641.50	——	Pr	B	50	R.B.	B	R	C	M	W	no vegita.
76	KK076	1560.40	4641.63	——	Q_1	B	50	D.B.	B	R	C	M	W	no vegita.
77	KK077	1560.67	4641.70	——	Pr	B	50	B.	B	R	C	M	W	no vegita.
78	KK078	1561.10	4641.95	——	Pr	B	50	B.	B	R	C	M	W	no vegita.
79	KK079	1560.37	4641.99	——	Pr	B	50	B.	B	R	C	M	W	no vegita.
80	KK080	1560.70	4642.28	——	Pr	B	50	R.B.	B	R	C	M	W	no vegita.

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 / 100 / 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
81	KK081	1560.40	4642.53	——	Pr	B	50	R.B.	B	R	C	M	W	no vegita.
82	KK082	1560.98	4642.42	——	Pr	B	50	B.	A B	R	C	F	W	sec. forest
83	KK083	1560.78	4642.46	——	Pr	B	50	D.B.	A B	R	S	M	W	sec. forest
84	KK084	1560.58	4642.56	——	Pr	B	50	R.B.	B	R	C	F	W	sec. forest
85	KK085	1561.00	4642.72	——	Pr	B	50	R.B.	A B	R	C	F	W	sec. forest
86	KK086	1560.77	4642.73	——	Pr	B	50	R.B.	A B	R	C	M	W	sec. forest
87	KK087	1560.52	4642.88	——	Pr	B	50	D.B.	A B	R	C	M	W	sec. forest
88	KK088	1560.78	4643.18	——	Pr	B	50	D.B.	A B	R	C	F	W	sec. forest
89	KK089	1561.02	4644.03	——	Pr	B	50	B.	A B	R	C	F	W	sec. forest
90	KK090	1560.57	4643.20	——	Pr	B	50	R.B.	A B	R	C	F	W	sec. forest
91	KK091	1560.30	4643.15	——	Pr	B	50	R.B.	A B	R	C	F	W	sec. forest
92	KK092	1561.05	4644.77	——	Pr	B	50	B.	A B	R	C	M	W	sec. forest
93	KK093	1560.23	4644.55	——	Pr	B	50	B.	A B	R	C	F	W	sec. forest
94	KK094	1559.99	4644.37	——	Pr	B	50	B.	A B	R	C	F	W	sec. forest
95	KK095	1561.05	4645.00	——	Pr	B	50	B.	A B	R	C	F	W	sec. forest
96	KK096	1560.40	4645.07	——	P_2Cr	B	50	B.	A B	R	C	F	W	sec. forest
97	KK097	1561.00	4645.33	——	P_2Cr	B	50	D.B.	A B	R	C	S	W	sec. forest
98	KK098	1560.28	4645.55	——	P_2Cr	B	50	R.B.	A B	R	C	F	W	sec. forest
99	KK099	1559.90	4644.05	harzburgite	Pr	B	50	B.	B	R	C	F	W	sec. forest
100	KK100	1560.69	4643.60	——	Pr	C	50	Gr.B.	A B	F	C	M	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
101	KK101	1560.15	4645.80	sandstone	P_2Cr	B	50	B.	A B	R	C	F	W	sec. forest
102	KK102	1559.39	4644.60	———	P_2Cr	B	50	B.	B	R	C	F	W	sec. forest
103	KK103	1560.75	4643.85	———	Pr	B	50	Gr.B.	A B	R	C	M	W	sec. forest
104	KK104	1560.00	4645.00	———	P_2Cr	B	50	B.	A B	R	C	F	W	sec. forest
105	KK105	1560.25	4644.20	———	Pr	B	50	B.	B	R	C	M	W	sec. forest
106	KK106	1560.65	4644.25	———	Pr	B	50	D.B.	B	R	C	F	W	sec. forest
107	KK107	1560.02	4645.55	———	P_2Cr	B	50	B.	A B	R	C	F	W	sec. forest
108	KK108	1560.43	4644.58	harzburgite	Pr	B	50	R.B.	A B	R	C	F	W	sec. forest
109	KK109	1560.00	4645.98	———	P_2Cr	B	50	Y.B.	B	R	C	F	W	sec. forest
110	KK110	1560.75	4644.64	———	Pr	B	50	R.B.	B	R	C	F	W	sec. forest
111	KK111	1560.63	4644.92	———	Pr	B	50	R.B.	A B	R	C	F	W	sec. forest
112	KK112	1560.74	4645.15	———	P_2Cr	B	50	B.	B	R	C	F	W	sec. forest
113	KK113	1560.45	4643.66	perid. boulder	Pr	C	50	Gr.G.	A B	F	C	S	W	sec. forest
114	KK114	1560.48	4643.93	dunite	Pr	B	50	D.B.	A B	R	C	S	W	sec. forest
115	KK115	1560.23	4643.65	———	Pr	B	50	D.B.	A B	R	C	F	W	sec. forest
116	KK116	1560.25	4643.97	———	Pr	B	50	B.	A B	R	C	S	W	sec. forest
117	KK117	1560.08	4643.45	perid. boulder	Pr	C	50	G.B.	A B	F	C	M	W	sec. forest
118	KK118	1560.08	4642.92	———	Pr	B	50	B.G.	A B	R	C	M	W	sec. forest
119	KK119	1560.13	4642.60	dunite	Pr	B	50	D.B.	A B	R	C	F	W	sec. forest
120	KK120	1560.13	4642.17	dunite	Pr	B	50	B.	B	R	C	F	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
121	KK201	1562.50	4639.43	perid. boulder	Pr	B	150	L.B.	A B	R	C	F	W	pri.forest
122	KK202	1562.00	4639.45	———	Pr	B	150	D.B.	B	F	C	S	W	pri.forest
123	KK203	1562.50	4640.05	———	Pr	C	100	D.B.	A B C	F	C	S	W	pri.forest
124	KK204	1562.00	4640.09	———	Pr	B	150	B.	B	R	C	S	W	sec.forest
125	KK205	1562.48	4640.53	———	Pr	C	150	B.	A B C	F	C	F	W	sec.forest
126	KK206	1562.79	4641.02	———	Pr	B	150	B.	B	R	C	S	W	sec.forest
127	KK207	1562.35	4641.02	———	Pr	B	150	B.	A B	R	C	F	W	sec.forest
128	KK208	1561.99	4641.00	———	Pr	B	150	B.	B	R	C	F	W	sec.forest
129	KK209	1562.69	4641.45	———	Pr	B	150	B.	B	R	C	M	W	sec.forest
130	KK210	1562.30	4641.50	———	Pr	B	150	B.	B	F	C	S	W	sec.forest
131	KK211	1562.00	4641.50	———	Pr	B	150	R.B.	A B	R	C	F	W	sec.forest
132	KK212	1562.75	4642.02	perid. boulder	Pr	C	140	Gr.G.	A B C	M	C	M	W	sec.forest
133	KK213	1562.30	4641.92	———	Pr	B	150	R.B.	B	F	C	F	W	sec.forest
134	KK214	1562.00	4642.00	———	Pr	B	150	B.	B	R	C	M	W	sec.forest
135	KK215	1562.77	4642.49	perid. boulder	Pr	C	120	Gr.G.	A B C	M	C	M	W	sec.forest
136	KK216	1562.48	4642.55	perid. boulder	Pr	C	120	Gr.G.	A B C	M	C	M	W	sec.forest
137	KK217	1562.75	4639.75	———	Pr	B	150	Y.B.	A B	R	C	F	W	pri.forest
138	KK218	1562.20	4642.50	———	Pr	B	150	B.	A B	R	C	M	W	sec.forest
139	KK219	1562.75	4640.33	———	Pr	B	150	Y.B.	B	R	C	F	W	sec.forest
140	KK220	1562.25	4639.75	———	Pr	C	100	D.B.	A B C	M	C	S	W	pri.forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
141	KK221	1562.23	4640.30	——	Pr	C	150	D.B.	A B C	M	C	F	W	sec. forest
142	KK222	1562.25	4640.74	——	Pr	B	150	R.B.	A B	R	C	F	W	sec. forest
143	KK223	1561.68	4639.65	——	Pr	B	150	B.	B	F	C	S	W	sec. forest
144	KK224	1561.73	4640.26	——	Pr	B	150	B.	B	R	C	F	W	sec. forest
145	KK225	1561.70	4640.72	——	Pr	B	150	B.	B	R	C	M	W	sec. forest
146	KK226	1561.75	4641.27	——	Pr	B	150	B.	A B	R	C	M	W	sec. forest
147	KK227	1561.70	4641.72	——	Pr	B	150	B.	A B	R	C	M	W	sec. forest
148	KK228	1561.70	4642.25	——	Pr	B	150	B.	A B	R	C	S	W	sec. forest
149	KK229	1561.23	4639.70	——	Pr	B	150	B.	B	R	C	S	W	sec. forest
150	KK230	1561.38	4645.14	——	Pr	C	110	Gr.B.	A B C	F	C	S	W	sec. forest
151	KK231	1561.29	4644.35	harzburgite	Pr	B	150	D.B.	A B	R	C	S	W	sec. forest
152	KK232	1561.40	4644.75	——	Pr	B	150	B.	A B	R	C	S	W	sec. forest
153	KK233	1561.45	4639.45	——	Pr	B	150	D.B.	B	F	C	S	W	sec. forest
154	KK234	1561.47	4640.10	——	Pr	B	150	R.B.	B	R	C	S	W	sec. forest
155	KK235	1561.94	4640.45	——	Pr	B	150	B.	B	R	C	F	W	sec. forest
156	KK236	1561.42	4640.42	——	Pr	B	150	B.	B	R	C	M	W	sec. forest
157	KK237	1561.00	4640.45	——	Pr	B	150	R.B.	B	R	C	S	W	sec. forest
158	KK238	1561.40	4641.00	——	Pr	B	150	B.	B	R	C	S	W	sec. forest
159	KK239	1560.99	4640.99	——	Pr	B	150	R.B.	B	R	C	S	W	sec. forest
160	KK240	1561.42	4641.50	——	Pr	B	150	B.	B	R	C	M	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 / 100 / 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
161	KK241	1561.48	4642.00	——	Pr	B	150	B.	B	R	C	S	W	sec. forest
162	KK242	1561.24	4642.30	——	Pr	B	150	B.	B	R	C	F	W	sec. forest
163	KK243	1561.99	4642.48	——	Pr	B	150	B.	A B	R	C	S	W	sec. forest
164	KK244	1561.55	4642.58	——	Pr	B	150	D.B.	A B	R	C	S	W	sec. forest
165	KK245	1561.00	4642.19	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
166	KK246	1561.28	4642.72	——	Pr	B	150	Y.B.	A B	F	C	M	W	sec. forest
167	KK247	1560.69	4642.02	dunite	Pr	B	150	R.B.	B	R	C	F	W	sec. forest
168	KK248	1561.45	4643.02	dunite	Pr	B	150	B.	B	R	C	M	W	sec. forest
169	KK249	1561.07	4643.07	——	Pr	B	150	B.	B	F	C	M	W	sec. forest
170	KK250	1561.27	4643.22	——	Pr	B	150	B.	B	F	C	S	W	sec. forest
171	KK251	1562.15	4642.28	——	Pr	C	150	D.B.	B C	F	C	M	W	sec. forest
172	KK252	1561.38	4643.52	——	Pr	B	150	B.G.	A B	R	C	S	W	sec. forest
173	KK253	1561.03	4643.51	——	Pr	B	150	D.B.	B	F	C	S	W	sec. forest
174	KK254	1561.22	4643.79	——	Pr	B	150	B.	B	F	C	S	W	sec. forest
175	KK255	1561.20	4640.23	——	Pr	B	150	B.	B	R	C	S	W	sec. forest
176	KK256	1561.36	4644.08	harzburgite	Pr	B	150	D.B.	B	R	C	F	W	sec. forest
177	KK257	1561.52	4644.52	harzburgite	Pr	B	150	R.B.	B	R	C	M	W	sec. forest
178	KK258	1561.08	4644.43	——	Pr	C	150	B.	A B C	F	C	F	W	sec. forest
179	KK259	1561.55	4644.98	——	Pr	B	150	B.	B	R	C	F	W	sec. forest
180	KK260	1561.25	4644.98	——	Pr	B	150	R.B.	A B	R	C	F	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
181	KK261	1561.23	4640.73	——	Pr	C	100	B.	B C	M	C	S	W	sec.forest
182	KK262	1561.52	4645.32	——	Pr	C	140	G.B.	A B C	F	C	M	W	sec.forest
183	KK263	1561.23	4645.34	sandstone boulder	P_2Cr	C	100	L.B.	B C	F	C	S	W	sec.forest
184	KK264	1561.20	4641.26	——	Pr	B	150	D.B.	A B	F	C	S	W	sec.forest
185	KK265	1561.53	4645.64	——	P_2Cr	B	150	L.B.	B	R	C	F	W	sec.forest
186	KK266	1561.23	4641.74	——	Pr	C	150	B.	A B C	R	C	M	W	sec.forest
187	KK267	1560.13	4644.75	——	Pr	B	150	B.	A B	R	C	F	W	sec.forest
188	KK268	1560.15	4645.28	sandstone	P_2Cr	B	150	Y.B.	A B	R	C	F	W	sec.forest
189	KK269	1560.89	4639.53	——	P_2Cr	C	150	L.B.	A B C	F	C	S	W	sec.forest
190	KK270	1560.55	4639.50	——	P_2Cr	C	150	L.B.	A B C	R	S	M	W	sec.forest
191	KK271	1560.94	4639.89	——	Pr	C	150	Y.B.	B C	M	C	S	W	sec.forest
192	KK272	1560.47	4639.99	——	P_2Cr	C	150	L.B.	A B C	F	C	M	W	sec.forest
193	KK273	1560.30	4640.50	——	P_2Cr	B	150	L.B.	A B	R	C	M	W	sec.forest
194	KK274	1560.54	4641.22	——	Pr	B	150	L.B.	A B	M	S	M	W	sec.forest
195	KK275	1560.92	4641.50	——	Pr	B	150	R.B.	B	R	C	M	W	no vegita.
196	KK276	1560.40	4641.63	——	Q_1	B	150	Gr.B.	B	F	C	M	W	no vegita.
197	KK277	1560.67	4641.70	——	Pr	B	150	B.	B	R	C	M	W	no vegita.
198	KK278	1561.10	4641.95	——	Pr	C	150	Gr.B.	B C	F	C	M	W	no vegita.
199	KK279	1560.37	4641.99	——	Pr	B	150	R.B.	B	R	C	M	W	no vegita.
200	KK280	1560.70	4642.28	——	Pr	B	150	R.B.	B	R	C	M	W	no vegita.

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Area: East of Ranau (Area K)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
201	KK281	1560.40	4642.53	——	Pr	B	150	R.B.	B	R	C	M	W	no vegita.
202	KK282	1560.98	4642.42	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
203	KK283	1560.78	4642.46	——	Pr	B	85	D.B.	A B	R	C	M	W	sec. forest
204	KK284	1560.58	4642.56	——	Pr	B	150	B.	B	R	C	F	W	sec. forest
205	KK285	1561.00	4642.72	——	Pr	B	150	D.B.	A B	R	C	F	W	sec. forest
206	KK286	1560.77	4642.73	——	Pr	B	150	B.	A B	R	C	M	W	sec. forest
207	KK287	1560.52	4642.88	——	Pr	B	150	D.B.	A B	R	C	M	W	sec. forest
208	KK288	1560.78	4643.18	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
209	KK289	1561.02	4644.03	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
210	KK290	1560.57	4643.20	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
211	KK291	1560.30	4643.15	——	Pr	B	150	D.B.	A B	R	C	F	W	sec. forest
212	KK292	1561.05	4644.77	——	Pr	B	150	B.	A B	R	C	M	W	sec. forest
213	KK293	1560.23	4644.55	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
214	KK294	1559.99	4644.37	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
215	KK295	1561.05	4645.00	——	Pr	B	150	B.	A B	R	C	F	W	sec. forest
216	KK296	1560.40	4645.07	——	P_2Cr	B	150	B.	A B	R	C	F	W	sec. forest
217	KK297	1561.00	4645.33	harzburgite	P_2Cr	B	150	D.B.	A B	R	C	S	W	sec. forest
218	KK298	1560.28	4645.55	——	P_2Cr	B	150	R.B.	A B	R	C	F	W	sec. forest
219	KK299	1559.90	4644.05	harzburgite	Pr	B	150	B.	B	R	C	F	W	sec. forest
220	KK300	1560.69	4643.60	——	Pr	C	70	Gr.B.	A B C	F	C	M	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (50 100 150 (cm))	G. *1	S. *2	T. *3	H. *4	Vegitation
221	KK301	1560.15	4645.80	sandstone	P_2Cr	B	150	B.	A B	R	C	F	W	sec. forest
222	KK302	1559.39	4644.60	——	P_2Cr	B	150	D.B.	B	R	C	F	W	sec. forest
223	KK303	1560.75	4643.85	——	Pr	C	80	Gr.B.	A B C	F	C	M	W	sec. forest
224	KK304	1560.00	4645.00	——	P_2Cr	B	150	B.	A B	R	C	F	W	sec. forest
225	KK305	1560.25	4644.20	——	Pr	B	150	B.	B	R	C	M	W	sec. forest
226	KK306	1560.65	4644.25	dunite	Pr	B	150	D.B.	B	R	C	F	W	sec. forest
227	KK307	1560.02	4645.55	sandstone	P_2Cr	B	150	B.	A B	F	C	F	W	sec. forest
228	KK308	1560.43	4644.58	harzburgite	Pr	B	150	R.B.	A B	R	C	F	W	sec. forest
229	KK309	1560.00	4645.98	——	P_2Cr	B	150	Y.B.	B	R	C	F	W	sec. forest
230	KK310	1560.75	4644.64	——	Pr	B	150	R.B.	B	R	C	F	W	sec. forest
231	KK311	1560.63	4644.92	——	Pr	B	150	R.B.	A B	R	C	F	W	sec. forest
232	KK312	1560.74	4645.15	——	P_2Cr	B	150	B.	B	R	C	F	W	sec. forest
233	KK313	1560.45	4643.66	perid. boulder	Pr	C	80	Gr.B.	A B C	F	C	S	W	sec. forest
234	KK314	1560.48	4643.93	dunite	Pr	B	150	D.B.	A B	R	C	S	W	sec. forest
235	KK315	1560.23	4643.65	——	Pr	C	120	Gr.B.	A B C	F	C	F	W	sec. forest
236	KK316	1560.25	4643.97	——	Pr	C	100	Gr.B.	A B C	F	C	S	W	sec. forest
237	KK317	1560.08	4643.45	perid. boulder	Pr	C	90	Gr.B.	A B C	F	C	M	W	sec. forest
238	KK318	1560.08	4642.92	——	Pr	B	150	B.	A B	R	C	M	W	sec. forest
239	KK319	1560.13	4642.60	dunite	Pr	C	110	Gr.B.	A B C	F	C	F	W	sec. forest
240	KK320	1560.13	4642.17	dunite	Pr	B	150	B.	B	R	C	F	W	sec. forest

*1 Gravel: many (M), few (F), rare or none (R). *2 Grain size: sandy (S), clay (C). *3 Topography: steep (S), moderate (M), flat (F).
*4 Humidity: dry (D), wet (W).

Appendix 5

Analytical results of soil geochemical samples in Area K

List of Geochemical Analysis(1)

Ser. No.	Sample No.	Location (km) X-coord	Location (km) Y-coord	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
1	KK001	4639.430	1562.500	5.84	634	11051	42.90	5210
2	KK002	4639.450	1562.000	9.29	706	8574	32.76	3430
3	KK003	4640.050	1562.500	1.61	223	2972	12.21	3976
4	KK004	4640.090	1562.000	9.42	513	8787	29.85	4076
5	KK005	4640.530	1562.480	6.13	539	9241	25.77	3860
6	KK006	4641.020	1562.790	9.28	231	9412	35.73	3332
7	KK007	4641.020	1562.350	10.84	212	7627	33.59	2309
8	KK008	4641.000	1561.990	11.06	63	8541	36.64	2075
9	KK009	4641.450	1562.690	10.77	96	9035	35.95	3225
10	KK010	4641.500	1562.300	10.30	155	8006	35.63	2150
11	KK011	4641.500	1562.000	9.50	200	8500	32.37	3217
12	KK012	4642.020	1562.750	3.16	253	4001	14.38	3108
13	KK013	4641.920	1562.300	11.19	35	9026	33.75	1679
14	KK014	4642.000	1562.000	8.41	405	7324	31.76	3963
15	KK015	4642.490	1562.770	2.72	229	3209	10.82	2784
16	KK016	4642.550	1562.480	4.63	263	5469	16.00	4025
17	KK017	4639.750	1562.750	3.79	422	7107	47.01	5475
18	KK018	4642.500	1562.200	7.38	638	7521	30.04	8636
19	KK019	4640.330	1562.750	8.78	530	9788	34.54	3473
20	KK020	4639.750	1562.250	2.37	530	7484	22.85	6535
21	KK021	4640.300	1562.230	3.07	233	4341	16.00	4140
22	KK022	4640.740	1562.250	10.04	250	9473	35.15	3347
23	KK023	4639.650	1561.680	9.64	182	8478	34.94	2789
24	KK024	4640.260	1561.730	8.97	243	9312	34.07	3866
25	KK025	4640.720	1561.700	6.76	426	11023	39.97	4648
26	KK026	4641.270	1561.750	11.27	356	7619	30.08	2217
27	KK027	4641.720	1561.700	10.76	337	8015	32.49	2376
28	KK028	4642.250	1561.700	9.92	248	6794	31.16	2271
29	KK029	4639.700	1561.230	5.78	506	9268	40.25	5894
30	KK030	4645.140	1561.380	5.08	554	6159	18.45	3852
31	KK031	4644.350	1561.290	7.45	401	8074	29.24	4572
32	KK032	4644.750	1561.400	9.71	412	6377	28.62	2811
33	KK033	4639.450	1561.450	5.56	338	6793	21.73	5040
34	KK034	4640.100	1561.470	6.78	266	11064	40.68	4887
35	KK035	4640.450	1561.940	9.87	145	8332	33.49	2256
36	KK036	4640.420	1561.420	4.60	810	10092	43.10	7955
37	KK037	4640.450	1561.000	7.42	403	7748	30.48	3601
38	KK038	4641.000	1561.400	10.26	173	8410	35.03	2437
39	KK039	4640.990	1560.990	6.22	653	9867	37.77	4923
40	KK040	4641.500	1561.420	8.60	246	9281	35.32	2839
41	KK041	4642.000	1561.480	10.73	227	7689	32.63	2490
42	KK042	4642.300	1561.240	10.15	137	7357	34.15	1904
43	KK043	4642.480	1561.990	9.26	420	7987	31.11	3417
44	KK044	4642.580	1561.550	7.38	447	7547	24.56	4429
45	KK045	4642.190	1561.000	8.90	145	6865	28.11	2008
46	KK046	4642.720	1561.280	6.72	605	9453	41.09	5429
47	KK047	4642.020	1560.690	7.17	524	9180	35.19	5130
48	KK048	4643.020	1561.450	9.21	183	8170	32.94	3174
49	KK049	4643.070	1561.070	10.21	195	8583	36.61	3543
50	KK050	4643.220	1561.270	9.07	313	8768	31.79	3784

List of Geochemical Analysis(2)

Ser. No.	Sample No.	Location(km) X-coord	Location(km) Y-coord	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
51	KK051	4642.280	1562.150	9.09	90	10003	38.48	2950
52	KK052	4643.520	1561.380	5.24	801	7697	20.09	4971
53	KK053	4643.510	1561.030	6.29	658	8007	24.49	4377
54	KK054	4643.790	1561.220	7.78	319	6780	26.49	5198
55	KK055	4640.230	1561.200	5.63	344	11607	42.47	5134
56	KK056	4644.080	1561.360	7.12	454	7111	25.81	5210
57	KK057	4644.520	1561.520	7.15	482	8737	36.52	4692
58	KK058	4644.430	1561.080	7.83	477	8050	29.45	4880
59	KK059	4644.980	1561.550	10.00	107	7625	32.59	1917
60	KK060	4644.980	1561.250	8.49	492	8232	29.85	4576
61	KK061	4640.730	1561.230	7.01	328	6449	22.25	3049
62	KK062	4645.320	1561.520	4.10	478	6740	19.56	4229
63	KK063	4645.340	1561.230	10.65	20	94	5.36	85
64	KK064	4641.260	1561.200	8.25	474	7540	26.55	3753
65	KK065	4645.640	1561.530	10.19	9	85	5.15	38
66	KK066	4641.740	1561.230	5.90	606	7268	17.40	3381
67	KK067	4644.750	1560.130	8.04	412	6755	28.88	2932
68	KK068	4645.280	1560.150	8.96	198	8083	32.62	3307
69	KK069	4639.530	1560.890	7.68	10	123	3.95	47
70	KK070	4639.500	1560.550	6.37	1	43	2.74	10
71	KK071	4639.890	1560.940	11.52	123	598	10.89	341
72	KK072	4639.990	1560.470	9.69	18	166	5.98	103
73	KK073	4640.500	1560.300	8.40	1>	103	4.52	27
74	KK074	4641.220	1560.540	9.23	28	110	10.61	53
75	KK075	4641.500	1560.920	9.22	244	7987	32.47	2918
76	KK076	4641.630	1560.400	3.73	631	12196	26.39	4629
77	KK077	4641.700	1560.670	9.89	219	6608	30.43	2047
78	KK078	4641.950	1561.100	9.91	418	6392	27.32	3815
79	KK079	4641.990	1560.370	9.83	234	6585	29.19	2289
80	KK080	4642.280	1560.700	9.75	130	7247	34.02	2055
81	KK081	4642.530	1560.400	8.41	270	7663	30.98	3251
82	KK082	4642.420	1560.980	8.66	254	8302	34.83	3420
83	KK083	4642.460	1560.780	7.47	518	7775	23.82	3554
84	KK084	4642.560	1560.580	6.80	108	9047	41.83	4087
85	KK085	4642.720	1561.000	7.65	138	9541	40.25	3666
86	KK086	4642.730	1560.770	6.31	133	10781	42.09	4373
87	KK087	4642.880	1560.520	6.52	227	10062	41.84	4327
88	KK088	4643.180	1560.780	7.16	216	10359	38.88	4551
89	KK089	4644.030	1561.020	8.78	553	8837	29.84	3873
90	KK090	4643.200	1560.570	6.26	129	10178	42.93	4017
91	KK091	4643.150	1560.300	5.45	290	10307	38.33	4326
92	KK092	4644.770	1561.050	7.68	308	8532	37.71	4887
93	KK093	4644.550	1560.230	7.87	404	7281	29.61	3842
94	KK094	4644.370	1559.990	9.31	383	7772	31.60	3793
95	KK095	4645.000	1561.050	10.28	151	6942	30.16	2605
96	KK096	4645.070	1560.400	8.54	350	7011	31.77	4056
97	KK097	4645.330	1561.000	8.86	370	4721	18.64	2657
98	KK098	4645.550	1560.280	10.76	43	7550	32.60	1795
99	KK099	4644.050	1559.900	8.57	367	7448	35.61	3609
100	KK100	4643.600	1560.690	1.64	211	1345	11.64	3346

List of Geochemical Analysis(3)

Ser. No.	Sample No.	Location(km) X-coord	Location(km) Y-coord	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
101	KK101	4645.800	1560.150	10.16	86	4784	22.31	1172
102	KK102	4644.600	1559.390	8.34	240	6045	28.80	2426
103	KK103	4643.850	1560.750	2.18	249	2922	11.76	2889
104	KK104	4645.000	1560.000	9.75	137	6421	28.08	2000
105	KK105	4644.200	1560.250	8.43	291	6754	30.58	3145
106	KK106	4644.250	1560.650	9.09	197	6927	29.42	2811
107	KK107	4645.550	1560.020	11.03	87	3594	23.37	1480
108	KK108	4644.580	1560.430	9.25	102	9568	38.33	2980
109	KK109	4645.980	1560.000	12.52	187	5215	28.25	2288
110	KK110	4644.640	1560.750	9.66	178	7850	35.39	3138
111	KK111	4644.920	1560.630	11.54	88	8825	38.24	2708
112	KK112	4645.150	1560.740	11.25	246	7762	34.29	3269
113	KK113	4643.660	1560.450	3.92	198	2223	11.18	2259
114	KK114	4643.930	1560.480	5.42	434	4005	18.60	3773
115	KK115	4643.650	1560.230	6.82	604	5351	20.32	3948
116	KK116	4643.970	1560.250	5.01	292	3082	16.70	2880
117	KK117	4643.450	1560.080	6.22	146	2060	9.11	2053
118	KK118	4642.920	1560.080	5.98	323	4988	15.30	2996
119	KK119	4642.600	1560.130	8.90	319	6463	23.05	3334
120	KK120	4642.170	1560.130	12.60	227	8662	38.82	4092

List of Geochemical Analysis(1)

Ser. No.	Sample No.	Location (km) X-coord	Location (km) Y-coord	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
1	KK201	4639.430	1562.500	9.02	1543	10083	39.89	4138
2	KK202	4639.450	1562.000	10.99	584	6460	28.78	4623
3	KK203	4640.050	1562.500	4.47	359	7833	16.81	2534
4	KK204	4640.090	1562.000	12.53	433	8601	33.11	3691
5	KK205	4640.530	1562.480	6.47	495	7422	28.16	3857
6	KK206	4641.020	1562.790	9.34	263	9096	37.09	3430
7	KK207	4641.020	1562.350	10.31	152	6256	31.57	2011
8	KK208	4641.000	1561.990	10.13	101	6668	35.09	2135
9	KK209	4641.450	1562.690	9.46	139	7609	33.28	3549
10	KK210	4641.500	1562.300	10.29	117	6736	34.94	1898
11	KK211	4641.500	1562.000	9.42	280	7101	31.69	3512
12	KK212	4642.020	1562.750	3.48	160	1453	10.04	2645
13	KK213	4641.920	1562.300	10.83	32	7839	34.01	1625
14	KK214	4642.000	1562.000	7.80	362	6510	30.58	4073
15	KK215	4642.490	1562.770	2.49	194	2733	8.97	1944
16	KK216	4642.550	1562.480	2.92	133	2581	13.58	3845
17	KK217	4639.750	1562.750	2.75	1349	5187	47.29	4048
18	KK218	4642.500	1562.200	7.01	560	5981	25.15	8789
19	KK219	4640.330	1562.750	8.07	568	9179	32.54	4134
20	KK220	4639.750	1562.250	1.72	414	5203	20.49	5881
21	KK221	4640.300	1562.230	2.75	270	3155	13.17	3591
22	KK222	4640.740	1562.250	10.16	264	9049	34.62	3551
23	KK223	4639.650	1561.680	7.91	504	6487	26.28	3710
24	KK224	4640.260	1561.730	8.44	443	8421	36.14	4379
25	KK225	4640.720	1561.700	5.27	608	8580	38.48	5542
26	KK226	4641.270	1561.750	10.78	260	6361	31.49	2354
27	KK227	4641.720	1561.700	10.07	311	7492	32.51	2280
28	KK228	4642.250	1561.700	10.16	195	6741	32.52	2258
29	KK229	4639.700	1561.230	5.71	571	8963	39.79	5976
30	KK230	4645.140	1561.380	2.92	234	2900	12.14	3205
31	KK231	4644.350	1561.290	6.68	362	7279	26.18	5163
32	KK232	4644.750	1561.400	9.11	359	5824	27.83	2813
33	KK233	4639.450	1561.450	4.21	231	4580	15.65	5107
34	KK234	4640.100	1561.470	6.02	229	9276	36.11	4212
35	KK235	4640.450	1561.940	9.36	136	7262	33.35	2234
36	KK236	4640.420	1561.420	3.05	793	7560	41.75	10136
37	KK237	4640.450	1561.000	6.38	424	9152	31.08	3838
38	KK238	4641.000	1561.400	9.75	167	8042	33.68	2401
39	KK239	4640.990	1560.990	5.19	801	8380	35.78	5594
40	KK240	4641.500	1561.420	8.01	249	8583	34.78	2657
41	KK241	4642.000	1561.480	9.91	179	6862	31.16	2335
42	KK242	4642.300	1561.240	9.21	194	6187	30.80	2345
43	KK243	4642.480	1561.990	8.56	343	7503	30.06	3701
44	KK244	4642.580	1561.550	6.71	473	7287	24.51	5125
45	KK245	4642.190	1561.000	9.35	165	6880	29.47	2097
46	KK246	4642.720	1561.280	4.45	879	8942	40.83	6258
47	KK247	4642.020	1560.690	6.86	449	7444	28.18	4107
48	KK248	4643.020	1561.450	8.59	166	7618	31.19	2976
49	KK249	4643.070	1561.070	8.97	263	8515	34.52	4093
50	KK250	4643.220	1561.270	8.74	234	7643	32.38	3520

List of Geochemical Analysis(2)

Ser. No.	Sample No.	Location(km) X-coord	Location(km) Y-coord	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
51	KK251	4642.280	1562.150	7.57	138	8255	35.95	2933
52	KK252	4643.520	1561.380	4.64	609	7898	19.27	5162
53	KK253	4643.510	1561.030	6.62	724	7430	24.12	4737
54	KK254	4643.790	1561.220	5.50	254	5533	19.97	4538
55	KK255	4640.230	1561.200	4.49	540	8636	38.42	5653
56	KK256	4644.080	1561.360	6.42	447	6550	23.23	4365
57	KK257	4644.520	1561.520	5.49	487	9790	35.77	4565
58	KK258	4644.430	1561.080	7.22	525	7210	27.73	5096
59	KK259	4644.980	1561.550	9.26	119	7135	31.41	2053
60	KK260	4644.980	1561.250	6.55	263	6675	19.80	4408
61	KK261	4640.730	1561.230	4.38	230	4550	16.24	4723
62	KK262	4645.320	1561.520	1.86	223	2859	12.42	3689
63	KK263	4645.340	1561.230	10.37	20	123	5.33	84
64	KK264	4641.260	1561.200	9.13	472	7054	25.90	4112
65	KK265	4645.640	1561.530	8.17	4	79	4.03	40
66	KK266	4641.740	1561.230	3.64	432	5822	25.69	3480
67	KK267	4644.750	1560.130	8.06	358	6437	29.77	3064
68	KK268	4645.280	1560.150	8.82	466	7248	31.14	4063
69	KK269	4639.530	1560.890	6.29	6	78	4.13	17
70	KK270	4639.500	1560.550	5.66	3	25	2.58	7
71	KK271	4639.890	1560.940	11.43	51	319	9.64	263
72	KK272	4639.990	1560.470	10.56	45	274	6.44	221
73	KK273	4640.500	1560.300	7.87	5	50	4.95	24
74	KK274	4641.220	1560.540	10.00	19	117	7.38	91
75	KK275	4641.500	1560.920	9.72	260	7301	33.79	2951
76	KK276	4641.630	1560.400	4.02	400	8615	27.02	5099
77	KK277	4641.700	1560.670	10.30	152	5528	27.84	1565
78	KK278	4641.950	1561.100	7.08	303	5615	21.39	3872
79	KK279	4641.990	1560.370	7.88	429	7562	33.98	2955
80	KK280	4642.280	1560.700	7.85	323	6802	32.15	3025
81	KK281	4642.530	1560.400	8.79	380	7609	32.27	3687
82	KK282	4642.420	1560.980	9.60	213	6944	33.14	2245
83	KK283	4642.460	1560.780	6.39	322	5824	20.06	2816
84	KK284	4642.560	1560.580	6.79	205	7889	41.07	5507
85	KK285	4642.720	1561.000	7.37	132	9100	40.84	3853
86	KK286	4642.730	1560.770	5.84	231	11315	42.35	5318
87	KK287	4642.880	1560.520	7.03	373	8953	39.73	5452
88	KK288	4643.180	1560.780	7.04	198	10801	40.07	4430
89	KK289	4644.030	1561.020	7.41	490	7777	26.68	3602
90	KK290	4643.200	1560.570	6.11	193	9652	42.45	5160
91	KK291	4643.150	1560.300	5.71	240	10674	42.63	3990
92	KK292	4644.770	1561.050	4.64	502	8802	37.29	9048
93	KK293	4644.550	1560.230	8.67	357	7424	30.02	3496
94	KK294	4644.370	1559.990	9.41	177	8092	31.64	3233
95	KK295	4645.000	1561.050	10.01	154	6728	30.11	2538
96	KK296	4645.070	1560.400	8.28	528	7352	31.02	5912
97	KK297	4645.330	1561.000	8.06	337	4874	17.80	2756
98	KK298	4645.550	1560.280	10.74	60	7392	34.57	2160
99	KK299	4644.050	1559.900	8.33	318	6791	32.82	3361
100	KK300	4643.600	1560.690	1.81	215	1343	10.74	3202

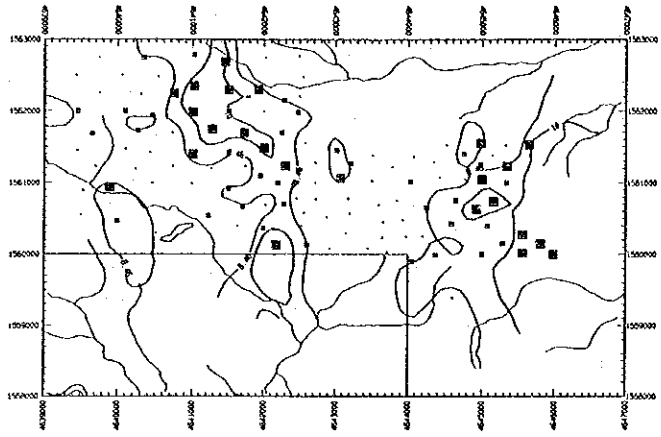
List of Geochemical Analysis(3)

Ser. No.	Sample No.	Location (km) X-coord	Location (km) Y-coord	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
101	KK301	4645.800	1560.150	11.03	84	4938	23.66	1364
102	KK302	4644.600	1559.390	7.75	454	6835	33.91	3743
103	KK303	4643.850	1560.750	3.20	335	3218	13.57	2388
104	KK304	4645.000	1560.000	10.16	123	7649	31.18	2195
105	KK305	4644.200	1560.250	8.33	531	8485	29.86	4282
106	KK306	4644.250	1560.650	9.11	229	6666	30.68	2967
107	KK307	4645.550	1560.020	13.49	46	3641	26.63	912
108	KK308	4644.580	1560.430	8.74	135	9643	38.02	3325
109	KK309	4645.980	1560.000	9.55	248	4840	25.98	1740
110	KK310	4644.640	1560.750	9.14	226	7096	32.91	3378
111	KK311	4644.920	1560.630	8.86	125	8013	34.60	2618
112	KK312	4645.150	1560.740	9.33	243	7349	32.21	3310
113	KK313	4643.660	1560.450	2.19	184	1702	8.69	2838
114	KK314	4643.930	1560.480	3.42	241	4015	17.18	3917
115	KK315	4643.650	1560.230	2.44	216	2202	11.02	4255
116	KK316	4643.970	1560.250	4.31	197	2979	11.25	3217
117	KK317	4643.450	1560.080	3.01	206	2275	11.34	2624
118	KK318	4642.920	1560.080	4.65	408	5969	25.85	3848
119	KK319	4642.600	1560.130	4.22	242	4077	15.80	3647
120	KK320	4642.170	1560.130	9.54	306	8737	30.12	4410

Appendix 6

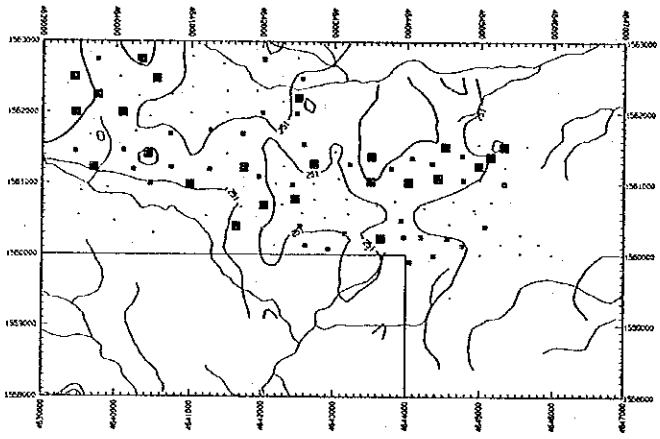
Distribution map of elements in Area K

Soil 50cm



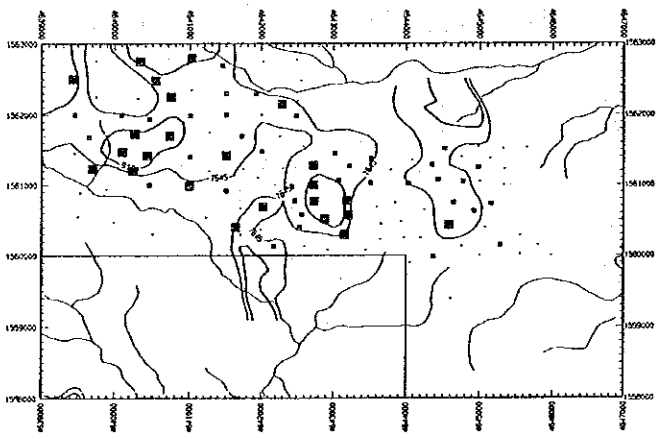
Al

10.000
8.460



Co

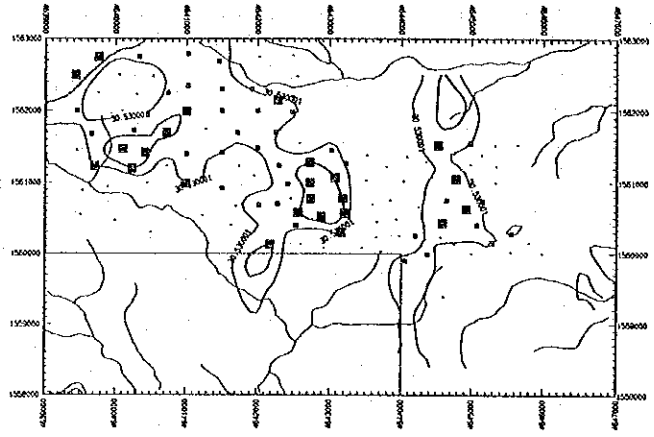
477.000
251.000



Cr

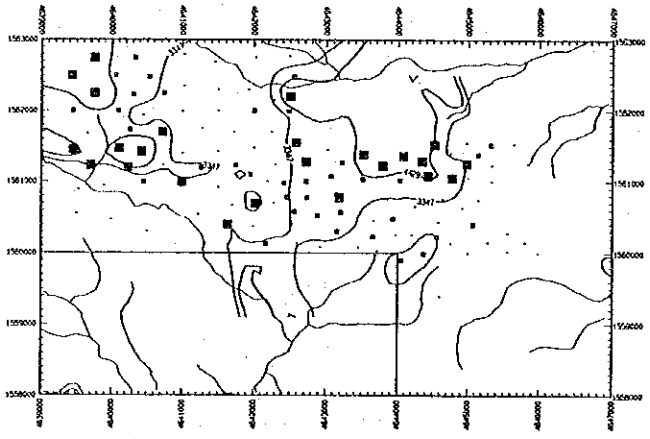
9180.000
7645.000

Soil 50cm



Fe

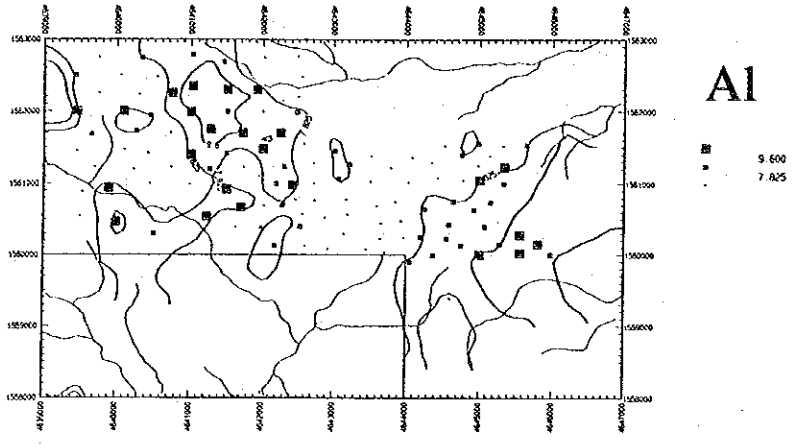
36.520
30.530

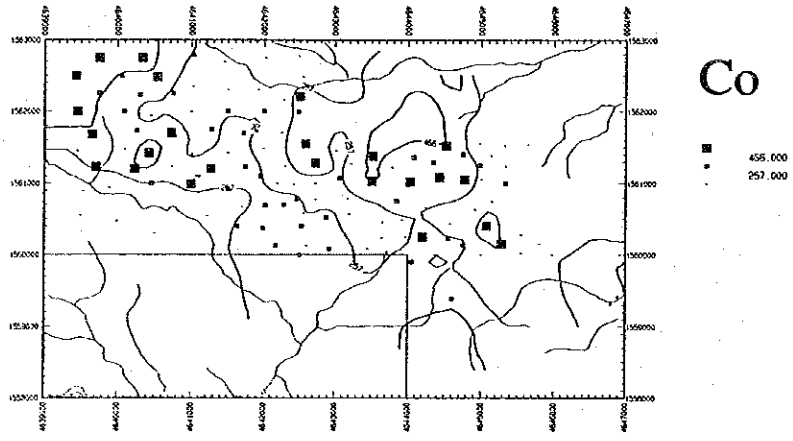


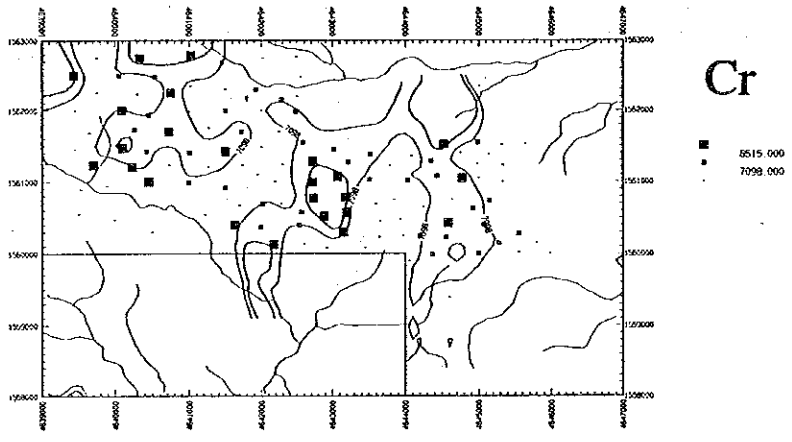
Ni

4429.000
3347.000

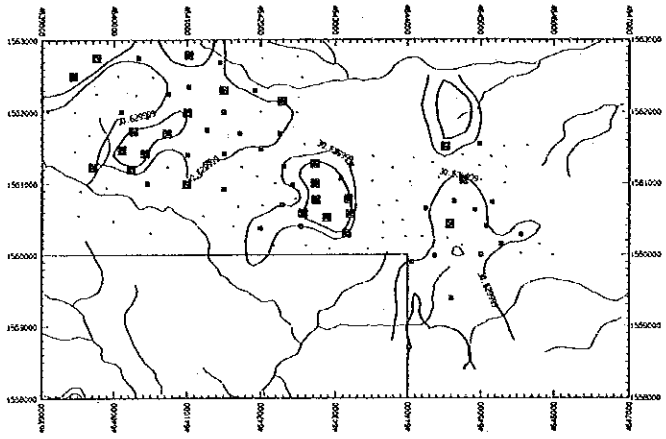
Soil 150cm





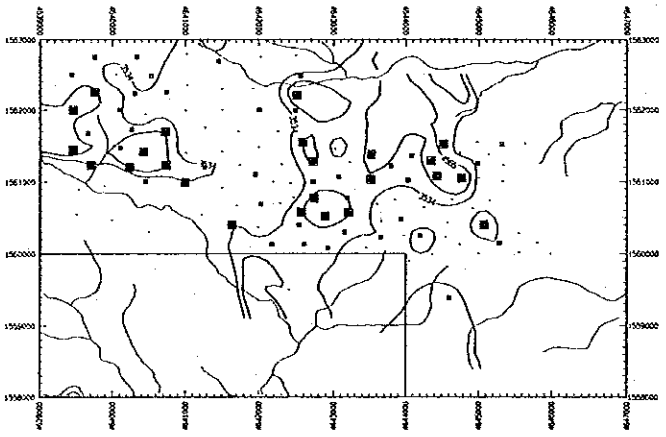


Soil 150cm



Fe

34.940
30.530



Ni

4565.000
3534.000

Appendix 7

List of stream sediment geochemical samples in Area L

Area: Upper Stream of S. Karamuak (Area L)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow *1	Size *2	Color
1	KL501	1511.80	4668.28	S. Karamuak	sst/mudstone	P_2Cr	3	4.0	3	3	Y.B.
2	KL502	1511.58	4668.45	S. Karamuak	peridotite	Pr	3	3.0	3	1	D.B.
3	KL503	1511.37	4668.39	S. Karamuak	peridotite	Pr	3	6.0	3	1	D.B.
4	KL504	1511.16	4668.16	S. Karamuak	———	Pr	3	5.0	3	1	D.B.
5	KL505	1511.01	4667.99	S. Karamuak	peridotite	Pr	3	5.0	3	1	D.B.
6	KL506	1510.77	4667.67	S. Karamuak	peridotite	Pr	3	5.0	3	1	D.B.
7	KL507	1510.39	4667.38	S. Karamuak	———	Gb	3	5.0	3	3	Y.B.
8	KL508	1510.23	4666.92	S. Karamuak	———	Gb	3	6.0	4	3	Y.B.
9	KL509	1509.94	4666.71	S. Karamuak	———	Gb	3	4.0	3	3	Y.B.
10	KL510	1509.82	4666.39	S. Karamuak	gabbro	Gb	3	8.0	3	3	B.
11	KL511	1509.56	4666.46	S. Karamuak	gabbro	Gb	3	8.0	3	3	B
12	KL512	1509.36	4666.15	S. Karamuak	gabbro	Gb	3	7.0	3	3	B.
13	KL513	1509.22	4665.88	S. Karamuak	———	Gb	3	10.0	3	3	B.
14	KL514	1509.16	4665.40	S. Karamuak	———	Gb	3	7.0	3	3	B.
15	KL515	1509.22	4665.12	S. Karamuak	———	Gb	3	10.0	3	4	B.
16	KL516	1509.38	4664.90	S. Karamuak	———	Gb	3	5.0	4	3	D.B.
17	KL517	1509.62	4664.62	S. Karamuak	gabbro	Gb	3	10.0	3	3	B.
18	KL518	1509.95	4664.33	S. Karamuak	———	P_2Cr	3	8.0	3	3	B.
19	KL519	1510.17	4664.08	S. Karamuak	sandstone	P_2Cr	3	8.0	3	3	B.
20	KL520	1511.82	4667.97	S. Karamuak	———	P_2Cr	2	2.5	2	3	Y.B.
21	KL521	1511.83	4667.60	S. Karamuak	———	P_2Cr	1	2.0	1	3	Y.B.
22	KL522	1511.79	4667.30	S. Karamuak	———	P_2Cr	1	2.0	2	3	Y.B.
23	KL523	1511.68	4667.68	S. Karamuak	———	P_2Cr	1	0.5	1	3	Y.B.
24	KL524	1511.34	4668.07	S. Karamuak	———	Pr	1	1.5	1	3	D.B.
25	KL525	1510.91	4667.72	S. Karamuak	———	Pr	2	2.0	2	3	D.B.
26	KL526	1511.21	4667.53	S. Karamuak	peridotite	Pr	2	2.0	2	3	R.B.
27	KL527	1511.33	4667.16	S. Karamuak	sandstone	P_2Cr	2	1.5	2	3	R.B.
28	KL528	1511.32	4666.82	S. Karamuak	shale	P_2Cr	2	1.0	2	3	R.B.
29	KL529	1511.27	4666.64	S. Karamuak	sandstone	P_2Cr	1	0.5	2	3	R.B.
30	KL530	1511.38	4666.55	S. Karamuak	sandstone	P_2Cr	1	0.5	2	3	R.B.
31	KL531	1511.49	4666.29	S. Karamuak	sandstone	P_2Cr	1	1.0	2	3	R.B.
32	KL532	1511.44	4666.00	S. Karamuak	sandstone	P_2Cr	1	1.0	2	3	R.B.
33	KL533	1511.14	4666.35	S. Karamuak	sandstone	P_2Cr	1	0.5	2	3	R.B.
34	KL534	1510.32	4667.71	S. Karamuak	———	Gb	2	1.5	4	1	R.B.
35	KL535	1509.77	4668.11	S. Karamuak	gabbro	Gb	2	2.0	3	1	R.B.
36	KL536	1509.48	4668.25	S. Karamuak	———	Gb	2	3.0	3	1	R.B.
37	KL537	1509.24	4668.30	S. Karamuak	———	Gb	2	2.0	4	3	R.B.
38	KL538	1508.93	4668.50	S. Karamuak	———	Gb	1	1.5	2	3	R.B.
39	KL539	1508.70	4668.74	S. Karamuak	———	Csba	1	1.0	1	3	Y.B.
40	KL540	1509.71	4667.92	S. Karamuak	gabbro	Gb	1	1.0	1	1	R.B.
41	KL541	1508.89	4668.36	S. Karamuak	gabbro	Gb	1	2.0	3	3	Y.B.
42	KL542	1508.56	4668.30	S. Karamuak	———	Gb	1	2.0	3	3	Y.B.
43	KL543	1510.18	4667.30	S. Karamuak	———	Gb	1	1.0	2	3	Y.B.
44	KL544	1510.42	4666.92	S. Karamuak	———	Gb	1	0.5	1	3	Y.B.
45	KL545	1510.03	4666.66	S. Karamuak	———	Gb	2	2.0	2	3	Y.B.
46	KL546	1510.02	4666.41	S. Karamuak	gabbro	Gb	2	4.0	3	2	Y.B.
47	KL547	1510.18	4666.07	S. Karamuak	gabbro	Gb	2	5.0	3	2	D.B.
48	KL548	1510.26	4665.79	S. Karamuak	———	Gb	2	5.0	3	2	Y.B.
49	KL549	1510.51	4665.52	S. Karamuak	mudstone	P_2Cr	1	1.0	3	3	L.B.
50	KL550	1510.40	4665.48	S. Karamuak	mudstone	P_2Cr	1	1.0	3	3	L.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.	Coordinates N	Coordinates E	Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow *1	Size *2	Color
51	KL551	1509.59	4666.77	S. Karamuak	basalt	Csba	2	1.5	4	1	D.B.
52	KL552	1509.28	4666.97	S. Karamuak	basalt	Csba	2	2.0	4	1	D.B.
53	KL553	1509.10	4667.06	S. Karamuak	basalt	Csba	2	3.0	3	1	D.B.
54	KL554	1508.65	4667.16	S. Karamuak	basalt	Csba	1	1.5	3	2	B.
55	KL555	1508.26	4667.12	S. Karamuak	basalt	Csba	1	1.0	2	2	D.B.
56	KL556	1508.68	4667.26	S. Karamuak	basalt	Csba	1	1.0	3	2	D.B.
57	KL557	1508.41	4667.50	S. Karamuak	basalt	Csba	1	1.0	2	2	D.B.
58	KL558	1509.00	4665.99	S. Karamuak	basalt	Csba	2	3.0	3	2	D.B.
59	KL559	1508.66	4665.87	S. Karamuak	basalt	Csba	1	1.5	3	2	D.B.
50	KL560	1508.44	4665.63	S. Karamuak	basalt	Csba	1	1.5	2	2	D.B.
61	KL561	1508.16	4665.48	S. Karamuak	basalt	Csba	1	1.5	2	2	D.B.
62	KL562	1508.67	4665.96	S. Karamuak	basalt	Csba	1	2.0	3	2	D.B.
63	KL563	1508.40	4666.00	S. Karamuak	basalt	Csba	1	1.5	3	2	D.B.
64	KL564	1509.12	4665.59	S. Karamuak	gabbro	Gb	1	1.0	3	3	B.
65	KL565	1508.82	4665.48	S. Karamuak	gabbro	Gb	1	1.5	3	3	B.
66	KL566	1508.92	4665.00	S. Karamuak	gabbro	Gb	2	3.0	4	2	D.B.
67	KL567	1508.65	4664.80	S. Karamuak	gabbro	Gb	2	5.0	3	2	D.B.
68	KL568	1508.35	4664.60	S. Karamuak	gabbro	Gb	2	6.0	3	2	D.B.
69	KL569	1508.14	4664.29	S. Karamuak	gabbro	Gb	1	2.5	3	2	B.
70	KL570	1508.10	4664.40	S. Karamuak	gabbro	Gb	1	3.0	3	2	B
71	KL571	1509.47	4664.61	S. Karamuak	———	Gb	1	1.5	3	3	D.B.
72	KL572	1509.27	4664.31	S. Karamuak	dolerite	Gb	1	1.0	3	3	D.B.
73	KL573	1511.73	4668.88	S. Karamuak	———	Pr	2	3.0	3	1	D.B.
74	KL574	1511.40	4668.96	S. Karamuak	———	Pr	2	3.0	3	1	D.B.
75	KL575	1511.87	4664.86	S. Karamuak	sandstone	P_2Cr	1	1.5	2	3	Y.B.
76	KL576	1511.81	4664.59	S. Karamuak	sandstone	P_2Cr	1	1.0	2	3	Y.B.
77	KL577	1511.68	4664.69	S. Karamuak	sandstone	P_2Cr	1	1.0	2	3	Y.B.
78	KL578	1511.72	4664.45	S. Karamuak	sandstone	P_2Cr	1	1.0	2	3	Y.B.
79	KL579	1511.46	4664.44	S. Karamuak	sandstone	P_2Cr	1	1.0	2	3	Y.B.
80	KL580	1511.88	4664.41	S. Karamuak	———	P_2Cr	1	1.0	2	3	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)

Appendix 8

Analytical results of stream sediment geochemical samples in Area L

List of Geochemical Analysis(1)

Ser. No.	Sample No.	Location (km) X-coord	Location (km) Y-coord	Fe %	Ti %
1	KL501	4668.280	1511.800	2.99	1.08
2	KL502	4668.450	1511.580	3.56	1.39
3	KL503	4668.390	1511.370	3.38	1.09
4	KL504	4668.160	1511.160	3.84	1.61
5	KL505	4667.990	1511.010	2.89	.77
6	KL506	4667.670	1510.770	4.60	2.36
7	KL507	4667.380	1510.390	2.44	.46
8	KL508	4666.920	1510.230	2.38	.37
9	KL509	4666.710	1509.940	2.38	.53
10	KL510	4666.390	1509.820	2.39	.42
11	KL511	4666.460	1509.560	2.41	.41
12	KL512	4666.150	1509.360	2.52	.46
13	KL513	4665.880	1509.220	2.75	.40
14	KL514	4665.400	1509.160	2.49	.54
15	KL515	4665.120	1509.220	2.50	.47
16	KL516	4664.900	1509.380	2.24	.36
17	KL517	4664.620	1509.620	2.20	.35
18	KL518	4664.330	1509.950	2.37	.37
19	KL519	4664.080	1510.170	2.50	.38
20	KL520	4667.970	1511.820	.95	.25
21	KL521	4667.600	1511.830	.91	.22
22	KL522	4667.300	1511.790	1.37	.21
23	KL523	4667.680	1511.680	.84	.26
24	KL524	4668.070	1511.340	9.26	.89
25	KL525	4667.720	1510.910	17.13	12.40
26	KL526	4667.530	1511.210	1.78	.35
27	KL527	4667.160	1511.330	2.53	.32
28	KL528	4666.820	1511.320	2.09	.33
29	KL529	4666.640	1511.270	1.45	.33
30	KL530	4666.550	1511.380	2.18	.34
31	KL531	4666.290	1511.490	1.89	.35
32	KL532	4666.000	1511.440	1.98	.32
33	KL533	4666.350	1511.140	1.72	.34
34	KL534	4667.710	1510.320	12.00	2.24
35	KL535	4668.110	1509.770	10.81	1.69
36	KL536	4668.250	1509.480	11.35	1.54
37	KL537	4668.300	1509.240	12.02	1.65
38	KL538	4668.500	1508.930	9.54	1.93
39	KL539	4668.740	1508.700	10.13	2.27
40	KL540	4667.920	1509.710	11.52	2.53
41	KL541	4668.360	1508.890	11.42	1.17
42	KL542	4668.300	1508.560	11.48	1.10
43	KL543	4667.300	1510.180	10.21	3.08
44	KL544	4666.920	1510.420	11.68	7.07
45	KL545	4666.660	1510.030	5.52	3.12
46	KL546	4666.410	1510.020	4.13	2.17
47	KL547	4666.070	1510.180	5.10	3.03
48	KL548	4665.790	1510.260	1.81	.40
49	KL549	4665.520	1510.510	1.13	.19
50	KL550	4665.480	1510.400	1.50	.27

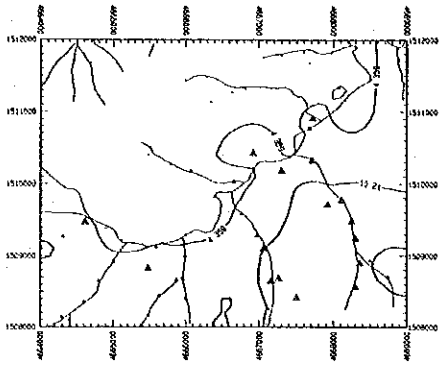
List of Geochemical Analysis(2)

Ser. No.	Sample No.	Location (km) X-coord	Location (km) Y-coord	Fe %	Ti %
51	KL551	4666.770	1509.590	8.84	1.27
52	KL552	4666.970	1509.280	8.91	1.66
53	KL553	4667.060	1509.100	10.77	.93
54	KL554	4667.160	1508.650	10.46	.95
55	KL555	4667.120	1508.260	10.16	1.01
56	KL556	4667.260	1508.680	10.80	.89
57	KL557	4667.500	1508.410	11.07	.87
58	KL558	4665.990	1509.000	8.19	.91
59	KL559	4665.870	1508.660	6.15	.86
60	KL560	4665.630	1508.440	6.39	.85
61	KL561	4665.480	1508.160	7.04	1.04
62	KL562	4665.960	1508.670	9.21	.88
63	KL563	4666.000	1508.400	9.51	.89
64	KL564	4665.590	1509.120	6.47	3.98
65	KL565	4665.480	1508.820	10.98	3.85
66	KL566	4665.000	1508.920	7.16	1.55
67	KL567	4664.800	1508.650	6.70	1.21
68	KL568	4664.600	1508.350	7.96	2.02
69	KL569	4664.290	1508.140	6.94	1.54
70	KL570	4664.400	1508.100	7.56	1.03
71	KL571	4664.610	1509.470	12.27	4.02
72	KL572	4664.310	1509.270	9.86	3.20
73	KL573	4668.880	1511.730	7.53	1.07
74	KL574	4668.960	1511.400	7.99	1.43
75	KL575	4664.860	1511.870	2.14	.29
76	KL576	4664.590	1511.810	2.21	.29
77	KL577	4664.690	1511.680	1.95	.26
78	KL578	4664.450	1511.720	2.57	.26
79	KL579	4664.440	1511.460	2.63	.27
80	KL580	4664.410	1511.880	2.32	.24

Appendix 9

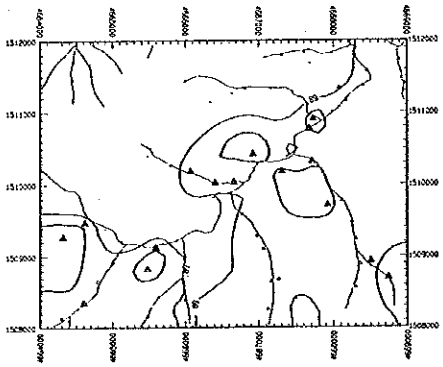
Distribution map of elements in Area L

Stream Sediments



Fe

10 210
4.359



Ti

1.930
.890

Appendix 10

List of soil geochemical samples in Area M

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
1	KM001	1590.11	4697.62	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
2	KM002	1590.08	4698.08	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
3	KM003	1590.12	4698.77	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
4	KM004	1590.25	4699.17	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
5	KM005	1590.16	4699.60	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
6	KM006	1590.09	4699.87	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
7	KM007	1590.29	4700.32	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
8	KM008	1589.92	4700.28	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
9	KM009	1590.22	4701.32	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
10	KM010	1590.22	4701.67	Linkabau	sandstone	P_2Cr	30	B.	R	C	M	W	secondary forest
11	KM011	1589.97	4702.08	Linkabau	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
12	KM012	1590.04	4704.15	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
13	KM013	1590.17	4705.25	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
14	KM014	1590.17	4706.62	Sungai sungai	sandstone	P_2Cr	30	L.B.	R	C	F	W	secondary forest
15	KM015	1590.17	4707.20	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
16	KM016	1589.70	4697.48	Linkabau	sandstone	P_2Cr	30	B.	R	S	S	W	secondary forest
17	KM017	1589.28	4697.50	Linkabau	———	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
18	KM018	1589.26	4697.93	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
19	KM019	1589.75	4698.36	Linkabau	sandstone	P_2Cr	30	B.	R	S	S	W	secondary forest
20	KM020	1589.25	4698.38	Linkabau	———	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
21	KM021	1589.52	4698.87	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
22	KM022	1589.23	4698.85	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	S	W	secondary forest
23	KM023	1589.90	4699.08	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
24	KM024	1589.31	4699.22	Linkabau	shale/sst.	P_2Cr	30	Y.B.	R	S	S	W	secondary forest
25	KM025	1589.75	4699.55	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
26	KM026	1589.78	4699.82	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
27	KM027	1589.30	4699.72	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
28	KM028	1589.52	4700.03	Linkabau	sandstone	P_2Cr	30	B.	R	S	S	W	secondary forest
29	KM029	1589.13	4700.29	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
30	KM030	1589.92	4700.79	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
31	KM031	1589.67	4700.68	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
32	KM032	1589.47	4700.56	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
33	KM033	1589.04	4700.95	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
34	KM034	1589.44	4701.10	Linkabau	sandstone	P_2Cr	30	B.	R	C	M	W	secondary forest
35	KM035	1589.77	4701.52	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
36	KM036	1589.42	4701.45	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
37	KM037	1589.04	4701.45	Linkabau	siltstone	P_2Cr	30	B.	R	C	M	W	secondary forest
38	KM038	1589.87	4701.77	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
39	KM039	1589.54	4701.86	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
40	KM040	1589.70	4702.27	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
41	KM041	1588.99	4702.10	Linkabau	sandstone	P_2Cr	30	B.	R	C	F	W	secondary forest
42	KM042	1589.45	4702.37	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
43	KM043	1589.90	4702.50	Linkabau	sandstone	P_2Cr	30	B.	M	S	F	W	secondary forest
44	KM044	1589.44	4702.84	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
45	KM045	1589.65	4703.22	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
46	KM046	1589.92	4703.30	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
47	KM047	1589.30	4703.50	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
48	KM048	1589.80	4703.60	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
49	KM049	1589.93	4703.85	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
50	KM050	1589.35	4703.89	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
51	KM051	1589.65	4704.17	Linkabau	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
52	KM052	1589.12	4704.18	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
53	KM053	1589.82	4704.38	Linkabau	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
54	KM054	1589.01	4704.38	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
55	KM055	1589.99	4704.76	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	C	F	W	secondary forest
56	KM056	1589.56	4704.65	Sungai sungai	sandstone	P_2Cr	30	B.G.	R	S	F	W	secondary forest
57	KM057	1589.17	4704.80	Sungai sungai	———	P_2Cr	30	B.	R	C	F	W	secondary forest
58	KM058	1589.42	4704.87	Sungai sungai	sandstone	P_2Cr	30	B.G.	R	C	F	W	secondary forest
59	KM059	1589.01	4705.23	Sungai sungai	sandstone	P_2Cr	30	B.G.	R	C	F	W	secondary forest
60	KM060	1589.94	4705.61	Sungai sungai	sandstone	P_2Cr	30	B.G.	R	C	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
61	KM061	1589.40	4705.85	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
62	KM062	1589.18	4705.96	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
63	KM063	1584.63	4704.08	Linkabau	sandstone	P_2Cr	30	D.B.	F	S	F	W	secondary forest
64	KM064	1589.52	4706.30	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
65	KM065	1589.86	4706.60	Sungai sungai	sandstone	P_2Cr	30	R.B.	R	C	F	W	secondary forest
66	KM066	1589.50	4706.80	Sungai sungai	sandstone	P_2Cr	30	R.B.	F	S	M	W	secondary forest
67	KM067	1589.90	4706.92	Sungai sungai	sandstone	P_2Cr	30	B.	R	C	F	W	secondary forest
68	KM068	1589.45	4707.15	Sungai sungai	———	P_2Cr	30	L.B.	F	S	M	W	secondary forest
69	KM069	1589.90	4707.47	Sungai sungai	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
70	KM070	1589.40	4707.52	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
71	KM071	1589.16	4707.39	Sungai sungai	———	P_2Cr	30	B.	F	S	F	W	secondary forest
72	KM072	1589.58	4707.80	Sungai sungai	sandstone	P_2Cr	30	L.B.	R	S	M	W	secondary forest
73	KM073	1589.02	4707.70	Sungai sungai	———	Q_2	30	B.	R	S	F	W	secondary forest
74	KM074	1589.93	4708.12	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
75	KM075	1589.45	4708.09	Sungai sungai	———	P_2Cr	30	B.	F	S	F	W	secondary forest
76	KM076	1589.13	4708.15	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
77	KM077	1589.25	4708.42	Sungai sungai	———	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
78	KM078	1589.60	4708.49	Sungai sungai	———	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
79	KM079	1589.92	4708.82	Sungai sungai	sandstone	P_2Cr	30	R.B.	F	S	F	W	secondary forest
80	KM080	1589.29	4708.90	Sungai sungai	———	P_2Cr	30	B.	R	S	M	W	secondary forest
81	KM081	1589.43	4709.32	Sungai sungai	shale	P_2Cr	30	L.B.	R	S	M	W	secondary forest
82	KM082	1589.02	4709.17	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
83	KM083	1589.53	4709.75	Sungai sungai	s.s./shale	P_2Cr	30	L.B.	F	C	M	W	secondary forest
84	KM084	1589.15	4709.80	Sungai sungai	shale	P_2Cr	30	L.B.	F	C	M	W	secondary forest
85	KM085	1588.77	4697.42	Linkabau	shale/s.s.	P_2Cr	30	Y.B.	R	C	S	W	secondary forest
86	KM086	1588.12	4697.33	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
87	KM087	1588.18	4697.72	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
88	KM088	1588.59	4698.05	Linkabau	shale/s.s.	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
89	KM089	1588.78	4698.30	Linkabau	sandstone	P_2Cr	30	Y.B.	F	C	F	W	secondary forest
90	KM090	1588.18	4698.20	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
91	KM091	1588.80	4698.75	Linkabau	sandstone	P_2Cr	40	Y.B.	F	S	S	W	secondary forest
92	KM092	1588.31	4698.69	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
93	KM093	1588.81	4699.16	Linkabau	shale/s.s.	P_2Cr	30	Y.B.	F	S	S	W	secondary forest
94	KM094	1588.49	4699.95	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
95	KM095	1588.14	4699.72	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
96	KM096	1588.75	4700.62	Linkabau	———	P_2Cr	30	R.B.	R	C	S	W	secondary forest
97	KM097	1588.39	4700.55	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
98	KM098	1588.30	4701.07	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
99	KM099	1588.80	4701.39	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
100	KM100	1588.80	4701.80	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
101	KM101	1588.51	4701.75	Linkabau	sandstone	P_2Cr	30	B.	R	C	M	W	secondary forest
102	KM102	1588.22	4701.59	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
103	KM103	1588.56	4702.12	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
104	KM104	1588.25	4702.06	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
105	KM105	1588.06	4702.23	Linkabau	———	Q_2	30	B.	F	C	F	W	secondary forest
106	KM106	1588.92	4702.52	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
107	KM107	1588.37	4702.45	Linkabau	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
108	KM108	1588.99	4702.80	Linkabau	sandstone	P_2Cr	30	B.	R	S	M	W	secondary forest
109	KM109	1588.16	4702.70	Linkabau	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
110	KM110	1588.58	4702.94	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
111	KM111	1588.21	4703.20	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	M	W	secondary forest
112	KM112	1588.79	4703.37	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
113	KM113	1588.45	4703.49	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
114	KM114	1588.12	4703.58	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
115	KM115	1588.32	4703.89	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
116	KM116	1588.67	4703.88	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
117	KM117	1588.10	4704.03	Linkabau	sandstone	P_2Cr	30	R.B.	R	S	F	W	secondary forest
118	KM118	1588.34	4704.30	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
119	KM119	1588.63	4704.51	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
120	KM120	1588.12	4704.55	Sungai sungai	———	P_2Cr	30	B.G.	R	S	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
121	KM121	1588.52	4704.63	Sungai sungai	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
122	KM122	1588.17	4704.87	Sungai sungai	———	P_2Cr	30	B.	F	S	F	W	secondary forest
123	KM123	1588.64	4705.27	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
124	KM124	1587.96	4705.15	Sungai sungai	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
125	KM125	1588.95	4705.70	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
126	KM126	1588.67	4705.62	Sungai sungai	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
127	KM127	1588.32	4705.64	Sungai sungai	———	Q_2	30	B.	R	C	F	W	secondary forest
128	KM128	1588.10	4705.42	Sungai sungai	———	Q_2	40	B.	R	C	F	W	secondary forest
129	KM129	1588.40	4705.87	Sungai sungai	sandstone	P_2Cr	30	B.	R	C	F	W	secondary forest
130	KM130	1588.70	4706.15	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
131	KM131	1588.02	4706.48	Sungai sungai	———	Q_2	30	B.	R	C	F	W	secondary forest
132	KM132	1588.37	4706.95	Sungai sungai	———	P_2Cr	30	D.B.	R	C	F	W	secondary forest
133	KM133	1588.77	4707.09	Sungai sungai	———	Q_2	30	D.B.	R	S	F	W	secondary forest
134	KM134	1588.65	4707.42	Sungai sungai	———	Q_2	30	B.	R	S	F	W	secondary forest
135	KM135	1587.98	4707.57	Sungai sungai	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
136	KM136	1588.73	4708.11	Sungai sungai	———	Q_2	30	D.B.	R	S	F	W	secondary forest
137	KM137	1588.85	4708.81	Sungai sungai	———	Q_2	30	D.B.	R	S	F	W	secondary forest
138	KM138	1588.22	4709.07	Sungai sungai	———	Q_2	30	B.	R	S	F	W	secondary forest
139	KM139	1588.32	4709.73	Sungai sungai	———	Q_2	30	D.B.	R	S	F	W	secondary forest
140	KM140	1588.80	4710.18	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
141	KM141	1588.83	4710.65	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	C	F	W	secondary forest
142	KM142	1588.10	4710.55	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
143	KM143	1587.73	4697.31	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
144	KM144	1587.35	4697.45	Linkabau	sandstone	P_2Cr	30	G.B.	M	S	S	W	secondary forest
145	KM145	1587.18	4697.32	Linkabau	sandstone	P_2Cr	30	G.B.	M	S	S	W	secondary forest
146	KM146	1587.72	4697.76	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
147	KM147	1587.18	4697.80	Linkabau	sandstone	P_2Cr	30	G.B.	F	S	S	W	secondary forest
148	KM148	1587.82	4698.22	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
149	KM149	1587.20	4698.22	Linkabau	sandstone	P_2Cr	30	G.B.	F	S	S	W	secondary forest
150	KM150	1587.24	4698.64	Linkabau	s.s./shale	P_2Cr	30	Y.B.	F	S	S	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
151	KM151	1587.90	4698.87	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
152	KM152	1587.28	4699.19	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
153	KM153	1587.62	4699.53	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
154	KM154	1587.25	4699.64	Linkabau	sandstone	P_2Cr	10	B.	R	S	F	W	secondary forest
155	KM155	1587.42	4699.92	Linkabau	sandstone	P_2Cr	20	B.	R	S	F	W	secondary forest
156	KM156	1587.15	4700.29	Linkabau	sandstone	P_2Cr	10	B.	R	S	M	W	secondary forest
157	KM157	1587.73	4700.32	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
158	KM158	1587.95	4700.80	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
159	KM159	1587.46	4700.81	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
160	KM160	1587.55	4701.41	Linkabau	sandstone	P_2Cr	30	L.B.	F	S	M	W	secondary forest
161	KM161	1587.32	4701.55	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	M	W	secondary forest
162	KM162	1587.95	4701.80	Linkabau	sandstone	P_2Cr	30	B.	F	C	M	W	secondary forest
163	KM163	1587.20	4701.88	Linkabau	sandstone	P_2Cr	30	R.B.	R	C	S	W	secondary forest
164	KM164	1587.73	4702.12	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
165	KM165	1587.67	4702.57	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
166	KM166	1587.30	4702.72	Linkabau	shale/s.s.	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
167	KM167	1587.75	4703.10	Linkabau	———	P_2Cr	30	R.B.	R	S	M	W	secondary forest
168	KM168	1587.30	4703.15	Linkabau	s.s./shale	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
169	KM169	1587.71	4703.45	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
170	KM170	1587.62	4703.76	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
171	KM171	1587.22	4703.93	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
172	KM172	1587.50	4704.41	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
173	KM173	1587.02	4704.60	Sungai sungai	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
174	KM174	1587.25	4704.84	Sungai sungai	sandstone	P_2Cr	30	Y.B.	F	C	F	W	secondary forest
175	KM175	1587.59	4705.12	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
176	KM176	1587.50	4705.41	Sungai sungai	sandstone	P_2Cr	30	Y.B.	F	S	M	W	secondary forest
177	KM177	1587.70	4705.74	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
178	KM178	1587.98	4705.89	Sungai sungai	———	Q_2	30	B.	R	C	F	W	secondary forest
179	KM179	1587.05	4705.75	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
180	KM180	1587.70	4706.18	Sungai sungai	———	Q_2	30	D.B.	R	S	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
181	KM181	1587.40	4706.33	Sungai sungai	———	Q_2	30	D.B.	R	S	F	W	secondary forest
182	KM182	1587.77	4706.73	Sungai sungai	sandstone	P_2Cr	30	L.B.	R	C	F	W	secondary forest
183	KM183	1587.58	4707.08	Sungai sungai	———	P_2Cr	30	Y.B.	R	C	M	W	secondary forest
184	KM184	1587.07	4707.43	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
185	KM185	1587.55	4707.72	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
186	KM186	1587.43	4708.10	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
187	KM187	1587.38	4708.57	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
188	KM188	1587.08	4708.84	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
189	KM189	1587.33	4709.40	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
190	KM190	1587.59	4709.64	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
191	KM191	1587.80	4709.82	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
192	KM192	1587.95	4710.10	Sungai sungai	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
193	KM193	1587.50	4710.22	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
194	KM194	1587.15	4710.32	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
195	KM195	1586.80	4697.35	Linkabau	sandstone	P_2Cr	30	B.	R	C	M	W	secondary forest
196	KM196	1586.24	4697.39	Linkabau	sandstone	P_2Cr	30	L.B.	F	S	S	W	secondary forest
197	KM197	1586.70	4697.75	Linkabau	———	P_2Cr	30	R.B.	R	C	S	W	secondary forest
198	KM198	1586.40	4697.85	Linkabau	———	P_2Cr	30	B.	F	S	M	W	secondary forest
199	KM199	1586.62	4698.27	Linkabau	———	P_2Cr	30	B.	R	C	F	W	secondary forest
200	KM200	1586.26	4698.27	Linkabau	sandstone	P_2Cr	30	Y.B.	F	C	S	W	secondary forest
201	KM201	1586.93	4698.89	Linkabau	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
202	KM202	1586.55	4698.72	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
203	KM203	1586.09	4698.75	Linkabau	sandstone	P_2Cr	30	L.B.	R	S	M	W	secondary forest
204	KM204	1586.40	4699.20	Linkabau	sandstone	P_2Cr	30	Y.B.	R	C	S	W	secondary forest
205	KM205	1586.94	4699.73	Linkabau	sandstone	P_2Cr	30	B.	R	S	S	W	secondary forest
206	KM206	1586.56	4699.77	Linkabau	sandstone	P_2Cr	30	B.	R	S	S	W	secondary forest
207	KM207	1586.24	4699.58	Linkabau	sandstone	P_2Cr	30	B.	F	C	M	W	secondary forest
208	KM208	1586.97	4700.52	Linkabau	sandstone	P_2Cr	10	B.	R	S	M	W	secondary forest
209	KM209	1586.48	4700.78	Linkabau	sandstone	P_2Cr	10	B.	R	S	M	W	secondary forest
210	KM210	1585.97	4700.68	Linkabau	sandstone	P_2Cr	20	Y.B.	R	S	M	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
211	KM211	1586.63	4701.38	Linkabau	sandstone	P_2Cr	20	Y.B.	R	S	F	W	secondary forest
212	KM212	1586.26	4701.30	Linkabau	sandstone	P_2Cr	20	Y.B.	R	S	M	W	secondary forest
213	KM213	1586.32	4701.62	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
214	KM214	1586.97	4701.53	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
215	KM215	1586.92	4702.35	Linkabau	———	P_2Cr	30	B.	F	S	M	W	secondary forest
216	KM216	1586.41	4702.24	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
217	KM217	1586.02	4702.07	Linkabau	sandstone	P_2Cr	30	L.B.	F	C	M	W	secondary forest
218	KM218	1586.58	4702.54	Linkabau	sandstone	P_2Cr	30	Y.B.	R	C	M	W	secondary forest
219	KM219	1586.15	4702.62	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
220	KM220	1586.83	4702.92	Linkabau	s.s./shale	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
221	KM221	1586.28	4702.95	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
222	KM222	1586.65	4703.42	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
223	KM223	1586.82	4703.89	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
224	KM224	1586.18	4704.15	Linkabau	———	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
225	KM225	1586.60	4704.42	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
226	KM226	1586.01	4704.26	Linkabau	s.s./shale	P_2Cr	30	B.	R	S	F	W	secondary forest
227	KM227	1586.70	4701.10	Linkabau	sandstone	P_2Cr	20	B.	F	S	F	W	secondary forest
228	KM228	1586.99	4705.27	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	C	F	W	secondary forest
229	KM229	1586.47	4705.17	Sungai sungai	———	P_2Cr	30	D.B.	R	S	F	W	secondary forest
230	KM230	1586.13	4705.08	Sungai sungai	———	Q_2	30	B.	F	S	F	W	secondary forest
231	KM231	1586.14	4705.42	Sungai sungai	sandstone	P_2Cr	50	D.B.	R	S	F	W	secondary forest
232	KM232	1586.68	4705.65	Sungai sungai	———	Q_2	30	B.	F	S	F	W	secondary forest
233	KM233	1586.30	4705.70	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
234	KM234	1586.81	4706.13	Sungai sungai	———	P_2Cr	20	B.	R	C	F	W	secondary forest
235	KM235	1586.64	4706.55	Sungai sungai	sandstone	P_2Cr	20	B.	R	S	F	W	secondary forest
236	KM236	1586.30	4706.82	Sungai sungai	sandstone	P_2Cr	20	B.	R	S	F	W	secondary forest
237	KM237	1586.15	4707.35	Sungai sungai	———	P_2Cr	20	B.	R	C	M	W	secondary forest
238	KM238	1586.78	4707.72	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
239	KM239	1586.50	4707.89	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
240	KM240	1586.29	4707.70	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
241	KM241	1586.57	4709.42	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
242	KM242	1586.18	4709.36	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
243	KM243	1585.97	4709.57	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
244	KM244	1586.70	4709.85	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
245	KM245	1586.78	4710.27	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
246	KM246	1586.84	4710.67	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
247	KM247	1585.76	4697.43	Linkabau	sandstone	P_2Cr	30	L.B.	F	S	S	W	secondary forest
248	KM248	1585.38	4697.27	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
249	KM249	1585.85	4697.75	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
250	KM250	1585.38	4697.55	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	M	W	secondary forest
251	KM251	1585.43	4697.91	Linkabau	sandstone	P_2Cr	30	B.	F	C	M	W	secondary forest
252	KM252	1585.09	4697.83	Linkabau	s.s./shale	P_2Cr	30	B.G.	F	C	M	W	secondary forest
253	KM253	1585.87	4698.32	Linkabau	s.s./shale	P_2Cr	30	B.	F	S	S	W	secondary forest
254	KM254	1585.70	4698.75	Linkabau	sandstone	P_2Cr	30	L.B.	F	S	M	W	secondary forest
255	KM255	1585.20	4698.87	Linkabau	———	P_2Cr	30	B.G.	F	C	F	W	secondary forest
256	KM256	1585.55	4699.19	Linkabau	sandstone	P_2Cr	30	Y.B.	F	C	S	W	secondary forest
257	KM257	1585.72	4699.53	Linkabau	sandstone	P_2Cr	30	Y.B.	F	C	S	W	secondary forest
258	KM258	1585.23	4699.77	Linkabau	sandstone	P_2Cr	30	Y.B.	R	C	M	W	secondary forest
259	KM259	1585.97	4699.88	Linkabau	sandstone	P_2Cr	30	B.	F	C	M	W	secondary forest
260	KM260	1585.75	4700.17	Linkabau	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
261	KM261	1585.38	4700.09	Linkabau	sandstone	P_2Cr	30	Y.B.	F	C	M	W	secondary forest
262	KM262	1585.02	4700.20	Linkabau	sandstone	P_2Cr	30	B.G.	F	S	M	W	secondary forest
263	KM263	1585.34	4700.58	Linkabau	———	P_2Cr	30	B.G.	F	S	M	W	secondary forest
264	KM264	1585.54	4700.90	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
265	KM265	1585.95	4701.20	Linkabau	sandstone	P_2Cr	20	Y.B.	R	S	M	W	secondary forest
266	KM266	1585.18	4701.17	Linkabau	sandstone	P_2Cr	30	B.	R	S	F	W	secondary forest
267	KM267	1585.56	4701.55	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
268	KM268	1585.30	4701.70	Linkabau	s.s./shale	P_2Cr	25	Y.B.	F	S	F	W	secondary forest
269	KM269	1585.18	4701.94	Linkabau	s.s./shale	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
270	KM270	1585.43	4702.05	Linkabau	sandstone	P_2Cr	25	L.B.	F	S	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
271	KM271	1585.62	4702.57	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
272	KM272	1585.17	4702.82	Linkabau	———	P_2Cr	30	B.	F	S	F	W	secondary forest
273	KM273	1585.85	4703.20	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
274	KM274	1585.45	4703.17	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
275	KM275	1585.60	4703.69	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
276	KM276	1586.03	4703.97	Linkabau	sandstone	P_2Cr	25	B.	F	S	M	W	secondary forest
277	KM277	1585.54	4704.15	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
278	KM278	1585.40	4704.50	Linkabau	———	P_2Cr	30	B.	R	S	S	W	secondary forest
279	KM279	1585.37	4704.81	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
280	KM280	1585.49	4705.28	Sungai sungai	———	Q_2	30	B.	R	S	F	W	secondary forest
281	KM281	1585.22	4705.52	Sungai sungai	sandstone	P_2Cr	40	B.	R	S	F	W	secondary forest
282	KM282	1584.92	4705.57	Sungai sungai	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
283	KM283	1585.42	4705.79	Sungai sungai	sandstone	P_2Cr	40	D.B.	R	S	F	W	secondary forest
284	KM284	1585.96	4706.02	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
285	KM285	1585.50	4706.15	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
286	KM286	1585.85	4706.43	Sungai sungai	sandstone	P_2Cr	30	Y.B.	F	S	F	W	secondary forest
287	KM287	1585.55	4706.77	Sungai sungai	sandstone	P_2Cr	30	B.	F	C	M	W	secondary forest
288	KM288	1585.25	4706.99	Sungai sungai	sandstone	P_2Cr	30	Y.B.	F	S	M	W	secondary forest
289	KM289	1585.86	4707.49	Sungai sungai	———	P_2Cr	20	D.B.	F	C	F	W	secondary forest
290	KM290	1585.06	4707.45	Sungai sungai	sandstone	P_2Cr	30	B.	M	S	S	W	secondary forest
291	KM291	1585.93	4707.92	Sungai sungai	———	P_2Cr	30	D.B.	F	C	F	W	secondary forest
292	KM292	1585.54	4708.30	Sungai sungai	———	P_2Cr	20	D.B.	F	C	F	W	secondary forest
293	KM293	1585.50	4708.70	Sungai sungai	———	P_2Cr	20	D.B.	F	C	F	W	secondary forest
294	KM294	1585.44	4709.20	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
295	KM295	1585.80	4709.22	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
296	KM296	1585.25	4709.80	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
297	KM297	1585.35	4710.17	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
298	KM298	1585.10	4710.09	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
299	KM299	1585.99	4710.50	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
300	KM300	1584.77	4697.57	Linkabau	s.s./shale	P_2Cr	30	B.G.	F	C	S	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
301	KM301	1584.04	4697.65	Linkabau	———	P_2Cr	30	R.B.	F	S	M	W	secondary forest
302	KM302	1584.40	4697.80	Linkabau	———	P_2Cr	30	R.B.	F	S	M	W	secondary forest
303	KM303	1584.53	4698.08	Linkabau	———	P_2Cr	30	B.	F	C	M	W	secondary forest
304	KM304	1584.87	4698.48	Linkabau	sandstone	P_2Cr	30	B.G.	F	C	M	W	secondary forest
305	KM305	1584.18	4698.55	Linkabau	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
306	KM306	1584.70	4698.77	Linkabau	———	P_2Cr	30	B.G.	F	C	M	W	secondary forest
307	KM307	1584.88	4699.23	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
308	KM308	1584.35	4699.45	Linkabau	sandstone	P_2Cr	30	R.B.	F	C	S	W	secondary forest
309	KM309	1584.80	4699.88	Linkabau	sandstone	P_2Cr	30	B.G.	F	C	M	W	secondary forest
310	KM310	1584.49	4699.80	Linkabau	sandstone	P_2Cr	30	Y.B.	F	S	M	W	secondary forest
311	KM311	1584.42	4700.36	Linkabau	———	P_2Cr	30	L.B.	F	S	M	W	secondary forest
312	KM312	1584.66	4700.80	Linkabau	sandstone	P_2Cr	30	R.B.	F	C	M	W	secondary forest
313	KM313	1584.25	4700.75	Linkabau	sandstone	P_2Cr	30	Y.B.	R	S	S	W	secondary forest
314	KM314	1584.84	4701.22	Linkabau	———	P_2Cr	30	R.B.	R	C	M	W	secondary forest
315	KM315	1584.64	4701.55	Linkabau	———	P_2Cr	30	L.B.	R	S	F	W	secondary forest
316	KM316	1584.36	4701.50	Linkabau	———	P_2Cr	15	L.B.	R	S	M	W	secondary forest
317	KM317	1584.86	4701.72	Linkabau	s.s./shale	P_2Cr	30	R.B.	F	S	F	W	secondary forest
318	KM318	1584.34	4701.85	Linkabau	———	P_2Cr	20	L.B.	R	S	F	W	secondary forest
319	KM319	1584.87	4702.37	Linkabau	sandstone	P_2Cr	30	R.B.	F	S	F	W	secondary forest
320	KM320	1584.57	4702.20	Linkabau	s.s./shale	P_2Cr	30	R.B.	F	S	F	W	secondary forest
321	KM321	1584.07	4702.30	Linkabau	———	P_2Cr	20	Y.B.	F	S	M	W	secondary forest
322	KM322	1584.95	4702.73	Linkabau	———	P_2Cr	30	B.	F	S	F	W	secondary forest
323	KM323	1584.38	4702.73	Linkabau	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
324	KM324	1584.62	4702.93	Linkabau	sandstone	P_2Cr	30	B.	F	S	F	W	secondary forest
325	KM325	1584.23	4703.02	Linkabau	———	P_2Cr	20	Y.B.	R	S	M	W	secondary forest
326	KM326	1585.02	4703.29	Linkabau	———	P_2Cr	30	D.B.	F	S	F	W	secondary forest
327	KM327	1584.06	4703.24	Linkabau	———	Q_2	30	D.B.	R	C	F	W	secondary forest
328	KM328	1584.08	4703.62	Linkabau	———	P_2Cr	30	D.B.	R	C	F	W	secondary forest
329	KM329	1584.00	4703.95	Linkabau	sandstone	P_2Cr	30	B.	R	C	F	W	secondary forest
330	KM330	1584.70	4704.90	Sungai sungai	———	P_2Cr	30	B.	F	C	S	W	secondary forest

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

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
331	KM331	1584.60	4704.57	Sungai sungai	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
332	KM332	1584.03	4704.91	Sungai sungai	sandstone	P_2Cr	30	L.B.	R	C	M	W	secondary forest
333	KM333	1585.02	4705.10	Sungai sungai	———	P_2Cr	30	B.	R	S	F	W	secondary forest
334	KM334	1584.27	4705.12	Sungai sungai	———	P_2Cr	30	L.B.	R	S	S	W	secondary forest
335	KM335	1584.72	4705.47	Sungai sungai	———	P_2Cr	30	G.B.	F	C	F	W	secondary forest
336	KM336	1584.90	4705.94	Sungai sungai	sandstone	P_2Cr	40	Y.B.	F	S	F	W	secondary forest
337	KM337	1584.39	4705.75	Sungai sungai	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
338	KM338	1584.90	4706.27	Sungai sungai	sandstone	P_2Cr	40	Y.B.	F	S	F	W	secondary forest
339	KM339	1584.53	4706.16	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
340	KM340	1584.25	4706.17	Sungai sungai	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
341	KM341	1584.67	4706.70	Sungai sungai	sandstone	P_2Cr	40	Y.B.	R	S	F	W	secondary forest
342	KM342	1584.38	4706.50	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
343	KM343	1583.99	4706.62	Sungai sungai	sandstone	P_2Cr	30	B.	R	C	M	W	secondary forest
344	KM344	1584.69	4707.08	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
345	KM345	1584.40	4707.33	Sungai sungai	sandstone	P_2Cr	30	B.	R	C	F	W	secondary forest
346	KM346	1584.89	4707.77	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
347	KM347	1584.30	4707.83	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	M	W	secondary forest
348	KM348	1584.03	4708.00	Sungai sungai	sandstone	P_2Cr	30	Y.B.	F	S	S	W	secondary forest
349	KM349	1584.89	4708.27	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
350	KM350	1584.65	4708.48	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
351	KM351	1584.41	4708.67	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
352	KM352	1584.23	4709.09	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	S	W	secondary forest
353	KM353	1584.05	4709.33	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
354	KM354	1584.58	4710.02	Sungai sungai	s.s./shale	P_2Cr	30	Y.B.	R	S	S	W	secondary forest
355	KM355	1584.25	4710.12	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
356	KM356	1584.37	4710.47	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
357	KM357	1584.42	4710.88	Sungai sungai	sandstone	P_2Cr	30	Y.B.	R	S	F	W	secondary forest
358	KM358	1583.81	4697.50	Sungai sungai	s.s./shale	P_2Cr	30	B.G.	F	S	M	W	secondary forest
359	KM359	1583.52	4697.35	Sungai sungai	sandstone	P_2Cr	30	B.G.	F	S	M	W	secondary forest
360	KM360	1583.17	4697.50	Sungai sungai	———	Q_2	30	Y.B.	F	S	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)

Area: Lower Stream of S. Sugut (Area M)

Ser. No.	Sample No.	Coordinates N	Coordinates E	1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegitation
361	KM361	1583.55	4697.75	Linkabau	sandstone	P_2Cr	30	Y.G.	F	S	F	W	secondary forest
362	KM362	1583.83	4698.17	Linkabau	———	Q_2	30	B.G.	F	S	F	W	secondary forest
363	KM363	1583.47	4698.13	Linkabau	sandstone	P_2Cr	30	R.B.	F	S	F	W	secondary forest
364	KM364	1583.48	4698.47	Linkabau	sandstone	P_2Cr	30	R.B.	F	S	F	W	secondary forest
365	KM365	1583.92	4698.73	Linkabau	sandstone	P_2Cr	30	B.	F	S	S	W	secondary forest
366	KM366	1583.33	4698.90	Linkabau	sandstone	P_2Cr	30	B.G.	F	S	F	W	secondary forest
367	KM367	1583.75	4699.35	Linkabau	sandstone	P_2Cr	30	Y.B.	F	C	S	W	secondary forest
368	KM368	1583.10	4699.17	Linkabau	sandstone	P_2Cr	30	L.B.	R	C	S	W	secondary forest
369	KM369	1583.83	4699.82	Linkabau	sandstone	P_2Cr	30	B.	F	S	M	W	secondary forest
370	KM370	1583.40	4699.68	Linkabau	sandstone	P_2Cr	30	L.B.	F	C	S	W	secondary forest
371	KM371	1583.54	4700.28	Linkabau	sandstone	P_2Cr	30	L.B.	F	S	M	W	secondary forest
372	KM372	1583.11	4700.15	Linkabau	sandstone	P_2Cr	30	Y.B.	R	C	M	W	secondary forest
373	KM373	1583.83	4700.67	Linkabau	sandstone	P_2Cr	20	Y.B.	F	S	M	W	secondary forest
374	KM374	1583.26	4700.72	Linkabau	sandstone	P_2Cr	30	L.B.	R	C	M	W	secondary forest
375	KM375	1583.79	4701.43	Linkabau	———	P_2Cr	15	Y.B.	R	S	F	W	secondary forest
376	KM376	1583.50	4701.20	Linkabau	sandstone	P_2Cr	20	Y.B.	F	S	M	W	secondary forest
377	KM377	1583.13	4701.30	Linkabau	sandstone	P_2Cr	30	Y.B.	R	C	M	W	secondary forest
378	KM378	1583.62	4701.82	Linkabau	sandstone	P_2Cr	15	Y.B.	R	S	M	W	secondary forest
379	KM379	1583.08	4701.88	Linkabau	sandstone	P_2Cr	15	Y.B.	R	S	M	W	secondary forest
380	KM380	1583.82	4702.18	Linkabau	———	P_2Cr	20	L.B.	R	S	M	W	secondary forest
381	KM381	1583.35	4702.02	Linkabau	sandstone	P_2Cr	15	Y.B.	R	S	M	W	secondary forest
382	KM382	1583.75	4702.78	Linkabau	———	Q_2	30	Y.B.	R	S	F	W	secondary forest
383	KM383	1583.49	4702.62	Linkabau	sandstone	P_2Cr	10	Y.B.	R	S	F	W	secondary forest
384	KM384	1583.13	4702.47	Linkabau	———	P_2Cr	15	Y.B.	R	C	S	W	secondary forest
385	KM385	1583.39	4703.29	Linkabau	sandstone	P_2Cr	30	B.	R	C	M	W	secondary forest
386	KM386	1583.70	4703.37	Linkabau	———	Q_2	30	B.B.	R	S	F	W	secondary forest
387	KM387	1583.08	4703.50	Linkabau	sandstone	P_2Cr	30	B.	R	C	M	W	secondary forest
388	KM388	1583.52	4703.77	Linkabau	shale/s.s.	P_2Cr	30	B.	R	S	F	W	secondary forest
389	KM389	1583.87	4704.17	Linkabau	sandstone	P_2Cr	30	B.	R	C	F	W	secondary forest
390	KM390	1583.38	4704.18	Linkabau	sandstone	P_2Cr	30	Y.B.	R	C	F	W	secondary forest

*1Gravel: Many (M), Few (F), Rare or none (R)
*2Grain size: Sandy (S), Clayey (C)
*3Topography: Steep (S), Moderate (M), Flat (F)
*4Humidity: Dry (D), Wet (W)