

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegetation
		N	E										
391	KM391	1583.70	4704.45	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	F	S	F	W	secondary forest
392	KM392	1583.02	4704.45	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	C	F	W	secondary forest
393	KM393	1583.39	4704.69	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	C	F	W	secondary forest
394	KM394	1583.20	4704.90	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	C	F	W	secondary forest
395	KM395	1583.79	4705.21	Sungai sungai	---	P <sub>2</sub> Cr	30	B.	F	C	F	W	secondary forest
396	KM396	1583.50	4705.34	Sungai sungai	---	P <sub>2</sub> Cr	30	B.	F	C	F	W	secondary forest
397	KM397	1582.95	4705.49	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	S	S	F	W	secondary forest
398	KM398	1583.35	4705.67	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	S	S	F	W	secondary forest
399	KM399	1583.22	4705.97	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	S	S	F	W	secondary forest
400	KM400	1583.81	4706.00	Sungai sungai	---	P <sub>2</sub> Cr	30	Y.B.	S	S	M	W	secondary forest
401	KM401	1583.18	4706.33	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
402	KM402	1583.72	4706.30	Sungai sungai	s.s./shale	P <sub>2</sub> Cr	30	L.B.	F	S	M	W	secondary forest
403	KM403	1583.10	4706.55	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
404	KM404	1583.56	4706.74	Sungai sungai	s.s./shale	P <sub>2</sub> Cr	30	L.B.	F	S	F	W	secondary forest
405	KM405	1583.02	4706.85	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
406	KM406	1583.92	4706.97	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	R	S	M	W	secondary forest
407	KM407	1583.37	4707.14	Sungai sungai	s.s./shale	P <sub>2</sub> Cr	30	Y.B.	F	C	F	W	secondary forest
408	KM408	1582.97	4707.22	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	R	S	F	W	secondary forest
409	KM409	1583.74	4707.32	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	F	S	S	W	secondary forest
410	KM410	1583.70	4707.67	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	F	S	S	W	secondary forest
411	KM411	1583.67	4708.02	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	R	S	S	W	secondary forest
412	KM412	1583.10	4708.00	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
413	KM413	1583.83	4708.22	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	M	S	S	W	secondary forest
414	KM414	1583.35	4708.22	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	R	S	M	W	secondary forest
415	KM415	1583.72	4708.48	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.	R	S	M	W	secondary forest
416	KM416	1583.90	4708.89	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
417	KM417	1583.60	4709.50	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
418	KM418	1583.19	4709.72	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
419	KM419	1583.28	4710.18	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
420	KM420	1583.26	4710.55	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	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		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E										
421	KM421	1582.82	4697.80	Linkabau	—	Q <sub>2</sub>	30	B.	R	S	F	W	secondary forest
422	KM422	1582.44	4697.83	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
423	KM423	1582.80	4698.23	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	C	F	W	secondary forest
424	KM424	1582.40	4698.33	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
425	KM425	1582.73	4698.65	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.G.	F	S	S	W	secondary forest
426	KM426	1582.34	4698.67	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
427	KM427	1582.73	4699.02	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	R	C	S	W	secondary forest
428	KM428	1582.47	4699.03	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	F	S	S	W	secondary forest
429	KM429	1582.80	4699.55	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	F	S	S	W	secondary forest
430	KM430	1582.34	4699.40	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	F	C	S	W	secondary forest
431	KM431	1582.74	4699.82	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	C	S	W	secondary forest
432	KM432	1582.22	4699.81	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	C	M	W	secondary forest
433	KM433	1582.45	4700.28	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	R	S	F	W	secondary forest
434	KM434	1582.92	4700.49	Linkabau	sandstone	P <sub>2</sub> Cr	30	L.B.	R	S	M	W	secondary forest
435	KM435	1582.78	4700.85	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	M	W	secondary forest
436	KM436	1582.20	4700.67	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	R	S	F	W	secondary forest
437	KM437	1582.39	4701.03	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	R	S	F	W	secondary forest
438	KM438	1582.68	4701.23	Linkabau	sandstone	P <sub>2</sub> Cr	30	B.	R	S	F	W	secondary forest
439	KM439	1582.84	4701.58	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	S	F	W	secondary forest
440	KM440	1582.60	4701.92	Linkabau	—	P <sub>2</sub> Cr	20	Y.B.	R	C	F	W	secondary forest
441	KM441	1582.82	4702.30	Linkabau	sandstone	P <sub>2</sub> Cr	20	Y.B.	R	S	F	W	secondary forest
442	KM442	1582.31	4702.17	Linkabau	—	P <sub>2</sub> Cr	20	Y.B.	R	S	M	W	secondary forest
443	KM443	1582.55	4702.37	Linkabau	—	P <sub>2</sub> Cr	15	Y.B.	R	S	F	W	secondary forest
444	KM444	1582.63	4702.78	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	M	W	secondary forest
445	KM445	1582.47	4703.07	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
446	KM446	1582.42	4703.37	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
447	KM447	1582.87	4703.68	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	M	W	secondary forest
448	KM448	1582.60	4703.82	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
449	KM449	1582.35	4703.63	Linkabau	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
450	KM450	1582.24	4703.92	Linkabau	sandstone	P <sub>2</sub> Cr	30	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)

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E										
451	KM451	1582.67	4704.55	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	C	F	W	secondary forest
452	KM452	1582.68	4704.88	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	C	F	W	secondary forest
453	KM453	1582.92	4705.17	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	C	F	W	secondary forest
454	KM454	1582.61	4705.32	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
455	KM455	1582.40	4705.45	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
456	KM456	1582.82	4705.72	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
457	KM457	1582.29	4705.67	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
458	KM458	1582.55	4706.03	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
459	KM459	1582.28	4706.08	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
460	KM460	1582.55	4706.53	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
461	KM461	1582.34	4707.06	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
462	KM462	1582.83	4707.43	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
463	KM463	1582.52	4707.48	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
464	KM464	1582.83	4707.92	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
465	KM465	1582.47	4707.82	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
466	KM466	1582.45	4708.38	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	S	M	W	secondary forest
467	KM467	1582.95	4708.64	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
468	KM468	1582.82	4708.91	Sungai sungai	s.s./shale	P <sub>2</sub> Cr	30	R.B.	F	C	F	W	secondary forest
469	KM469	1582.13	4709.25	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	S	F	W	secondary forest
470	KM470	1582.67	4709.32	Sungai sungai	s.s./shale	P <sub>2</sub> Cr	30	Y.B.	F	C	F	W	secondary forest
471	KM471	1582.78	4709.55	Sungai sungai	s.s./shale	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
472	KM472	1582.68	4710.10	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	F	S	F	W	secondary forest
473	KM473	1582.40	4710.44	Sungai sungai	shale	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest
474	KM474	1582.85	4710.73	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	B.G.	F	S	F	W	secondary forest
475	KM475	1582.50	4710.72	Sungai sungai	s.s./shale	P <sub>2</sub> Cr	30	Y.B.	F	S	F	W	secondary forest
476	KM476	1584.17	4709.73	Sungai sungai	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	S	F	W	secondary forest

\*1Gravel: Many (M), Few (F), Rare or none (R)

\*2Topography: Steep (S), Moderate (M), Flat (F)

\*3Grain size: Sandy (S), Clayey (C)

\*4Humidity: Dry (D), Wet (W)

Appendix 11

Analytical results of soil geochemical  
samples in Area M















List of Geochemical Analysis ( 6)

Table with columns: Ser. No., Sample No., Location (km) X-coord, Y-coord, As, Au, Ba, Co, Cr, Cu, Hg, K, Mg, Mn, Na, Ni, Pb, S, Sb, Sr, Ti, U, W, Zn. Rows contain data for samples 251-300, including coordinates and concentrations of various elements.







List of Geochemical Analysis ( 10)

Ser. No.	Sample No.	Location (km)		As ppm	Au peb	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
		X-coord	Y-coord																					
451	KW451	4704.530	1582.670	7	1	48	2	28	5	75	.14	.10	20	1	.02	6	12	.012	1.0	17	.24	2.6	2	60
452	KW452	4704.880	1582.680	3	1	60	1	29	5	37	.21	.13	20	1	.04	8	7	.010	.2	16	.20	2.0	2	36
453	KW453	4705.170	1582.920	4	1	95	1	49	12	39	.39	.23	19	2	.08	9	14	.012	2.7	25	.34	2.4	2	45
454	KW454	4705.320	1582.610	11	1	49	1	64	5	47	.14	.11	21	2	.03	14	12	.010	.7	15	.24	1.8	2	25
455	KW455	4705.450	1582.400	6	1	78	2	33	7	55	.25	.17	34	2	.03	7	2	.010	2.1	20	.24	1.6	2	20
456	KW456	4705.720	1582.820	1	1	157	4	39	10	42	.67	.28	54	1	.11	18	21	.011	2.5	18	.32	2.4	2	44
457	KW457	4705.670	1582.290	4	1	72	2	53	5	54	.21	.14	27	2	.05	27	7	.012	2.1	21	.27	2.2	2	21
458	KW458	4706.030	1582.550	9	1	105	2	77	8	57	.46	.27	30	2	.06	14	5	.013	4.7	22	.27	2.2	2	27
459	KW459	4706.080	1582.280	5	1	229	4	37	16	52	.61	.24	438	1	.11	17	18	.015	2.2	35	.29	2.2	2	39
460	KW460	4706.530	1582.550	5	1	44	4	447	6	57	.12	.09	25	2	.04	108	12	.013	2.2	16	.26	1.8	2	16
461	KW461	4707.060	1582.340	3	1	60	1	29	5	72	.20	.12	15	1	.04	5	12	.011	2.9	16	.24	2.0	2	15
462	KW462	4707.430	1582.520	3	1	296	3	30	8	65	.75	.16	46	1	.13	12	11	.014	2.2	32	.26	2.0	2	26
463	KW463	4707.480	1582.830	2	1	129	1	30	13	45	.52	.32	37	2	.06	12	22	.012	3.1	28	.28	1.8	2	37
464	KW464	4707.920	1582.830	2	1	308	4	21	6	90	.84	.21	50	1	.13	13	13	.017	.6	36	.28	2.0	2	29
465	KW465	4707.820	1582.470	14	2	105	3	22	12	43	.48	.29	37	3	.06	13	19	.011	5.0	23	.29	2.0	2	37
466	KW466	4708.380	1582.450	7	1	91	2	26	9	77	.38	.23	22	1	.06	9	14	.009	2.3	24	.27	2.0	2	23
467	KW467	4708.640	1582.950	1	1	363	3	34	9	50	1.32	.42	56	3	.23	11	19	.014	3.0	45	.35	2.4	2	38
468	KW468	4708.910	1582.820	1	1	107	1	47	13	105	.55	.30	28	1	.11	12	8	.012	2.2	16	.29	2.2	2	26
469	KW469	4709.250	1582.130	9	1	91	1	66	6	63	.33	.17	34	1	.08	16	16	.016	2.1	17	.29	2.2	2	18
470	KW470	4709.320	1582.670	1	1	126	1	56	19	104	.83	.37	29	1	.13	13	14	.011	2.2	22	.42	2.2	2	32
471	KW471	4709.550	1582.780	1	1	278	2	34	3	82	.75	.15	54	1	.10	10	13	.015	2.2	34	.26	2.2	2	20
472	KW472	4710.100	1582.680	11	1	53	1	31	5	49	.16	.13	17	2	.05	7	2	.011	2.1	16	.25	1.6	2	13
473	KW473	4710.440	1582.400	1	1	68	1	30	6	57	.24	.18	23	1	.05	6	13	.011	1.7	20	.24	2.2	2	17
474	KW474	4710.730	1582.850	11	1	110	2	32	6	62	.35	.19	65	1	.10	13	15	.012	1.2	18	.30	2.4	2	29
475	KW475	4710.720	1582.500	5	1	73	1	36	6	42	.23	.13	24	1	.04	9	11	.012	1.8	17	.21	2.0	2	19
476	KW476	4709.730	1584.170	1	1	176	5	33	6	81	.51	.21	74	1	.12	17	29	.014	1.5	18	.30	2.2	2	36

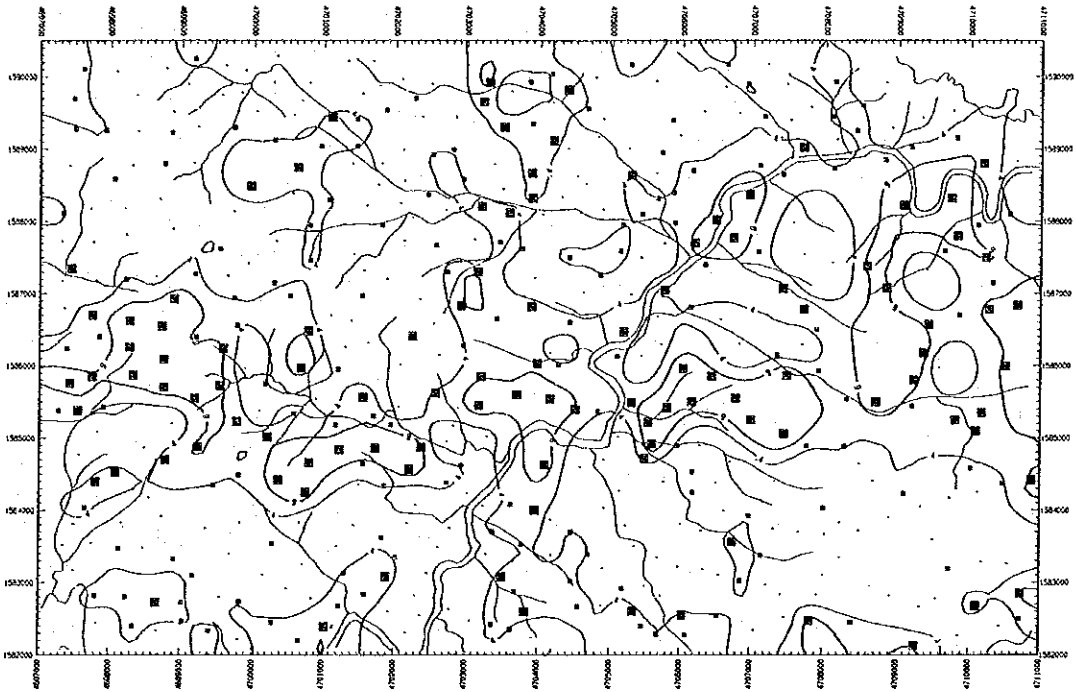
Appendix 12

Distribution map of elements in Area M



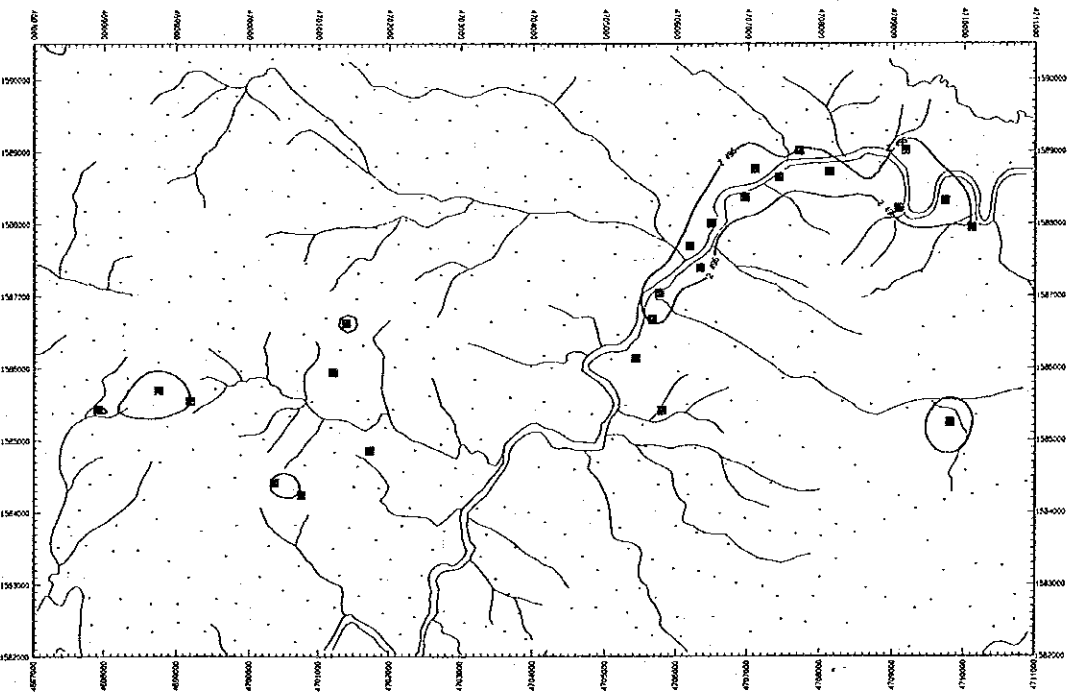


Soil



As

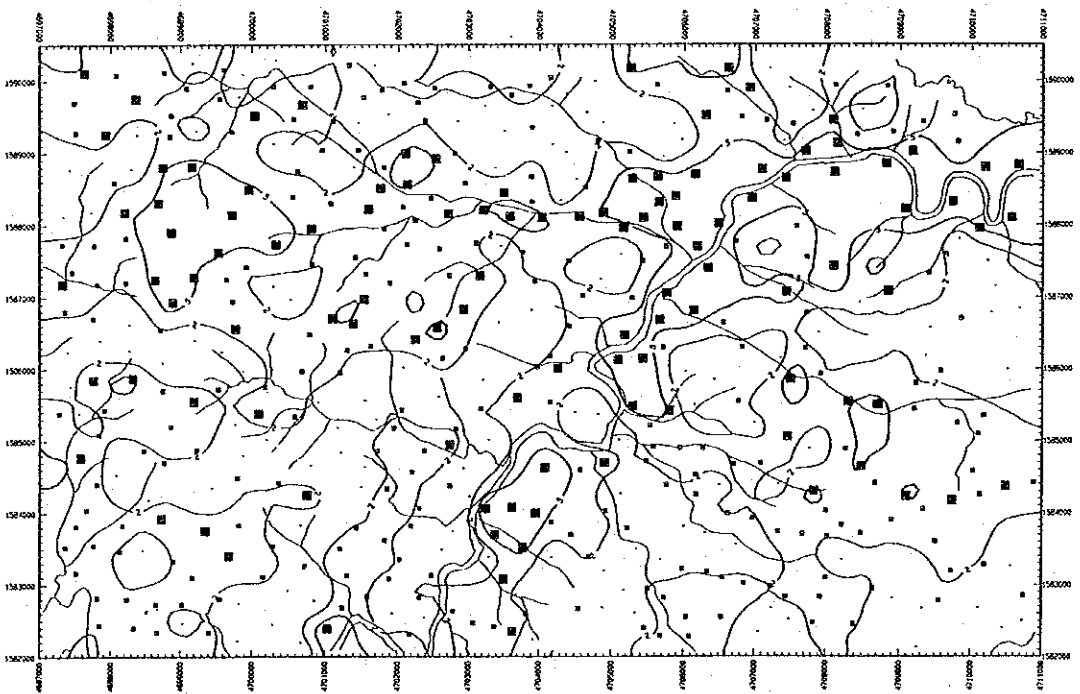
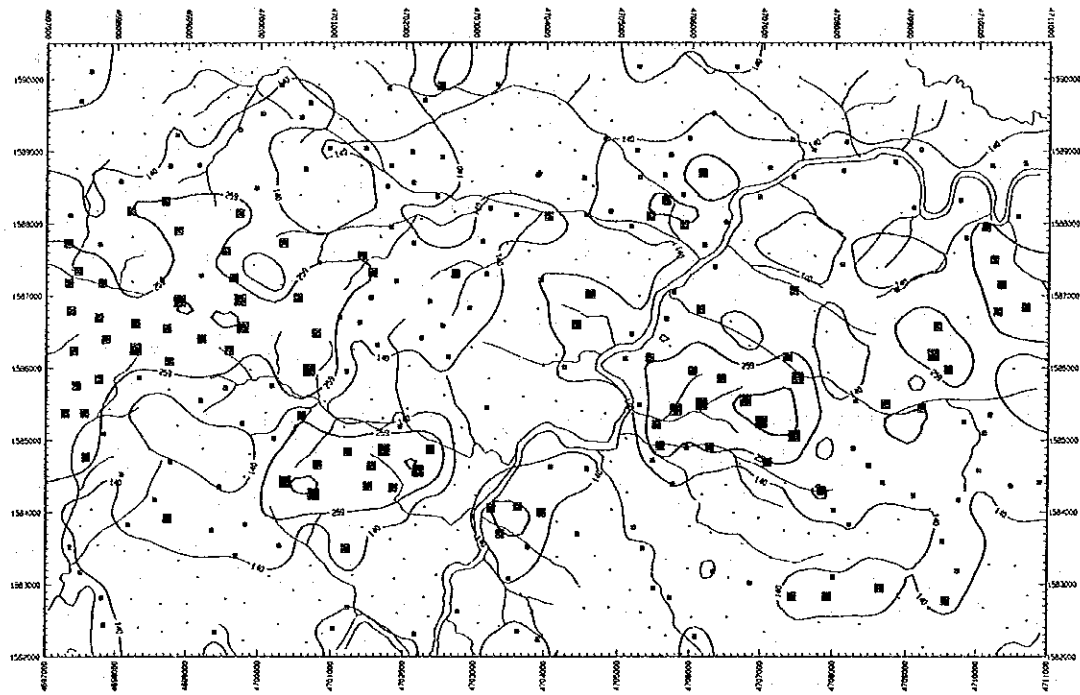
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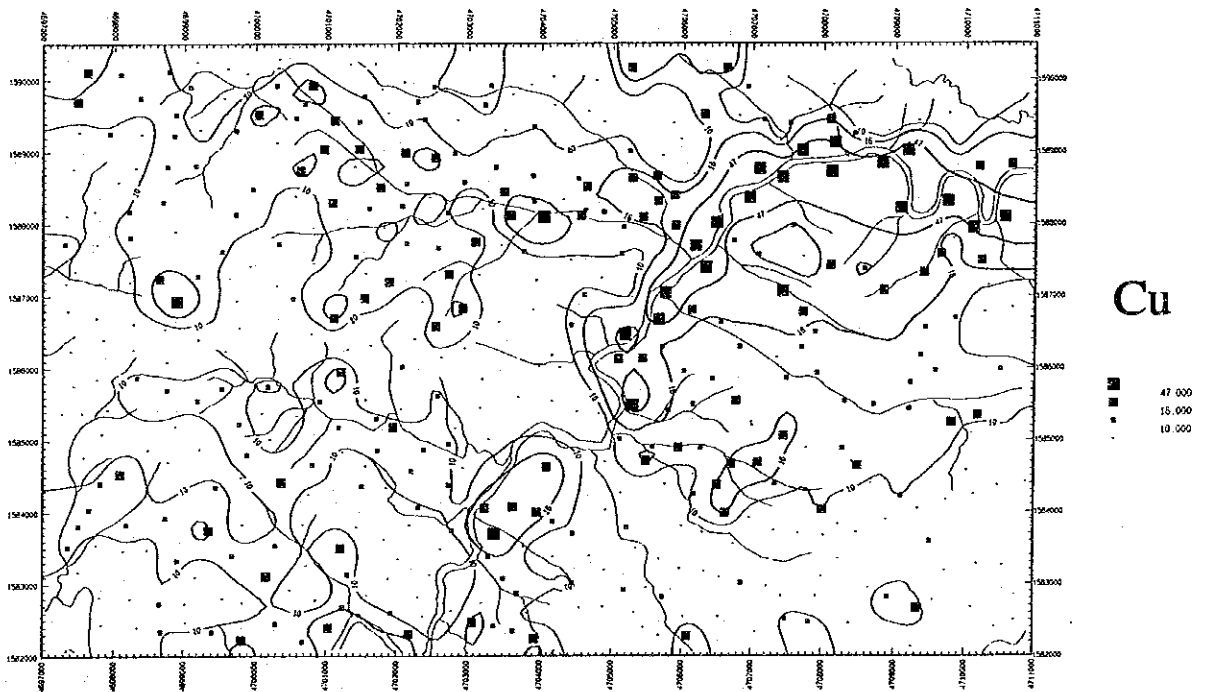
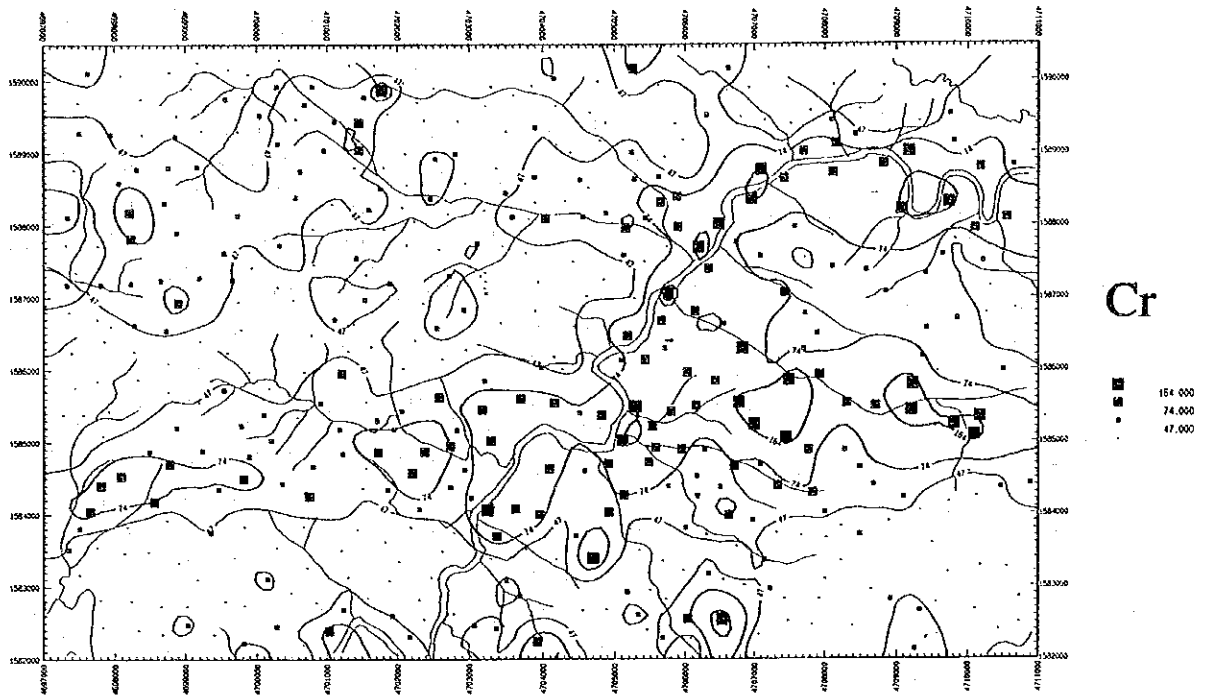
Au

■ 2.496

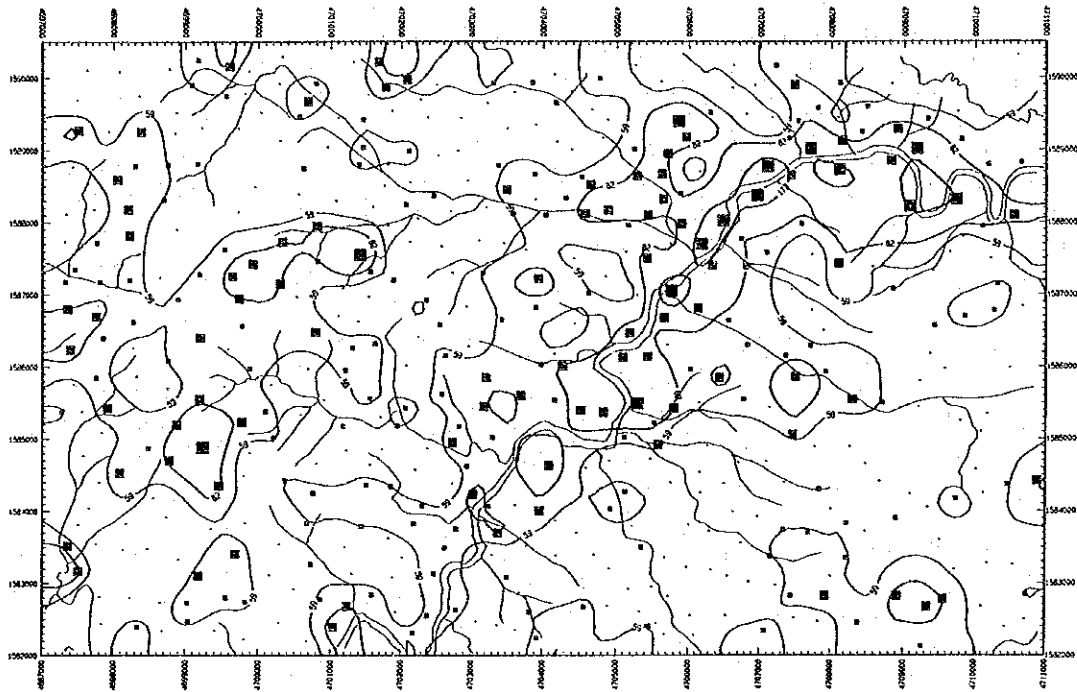
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Soil

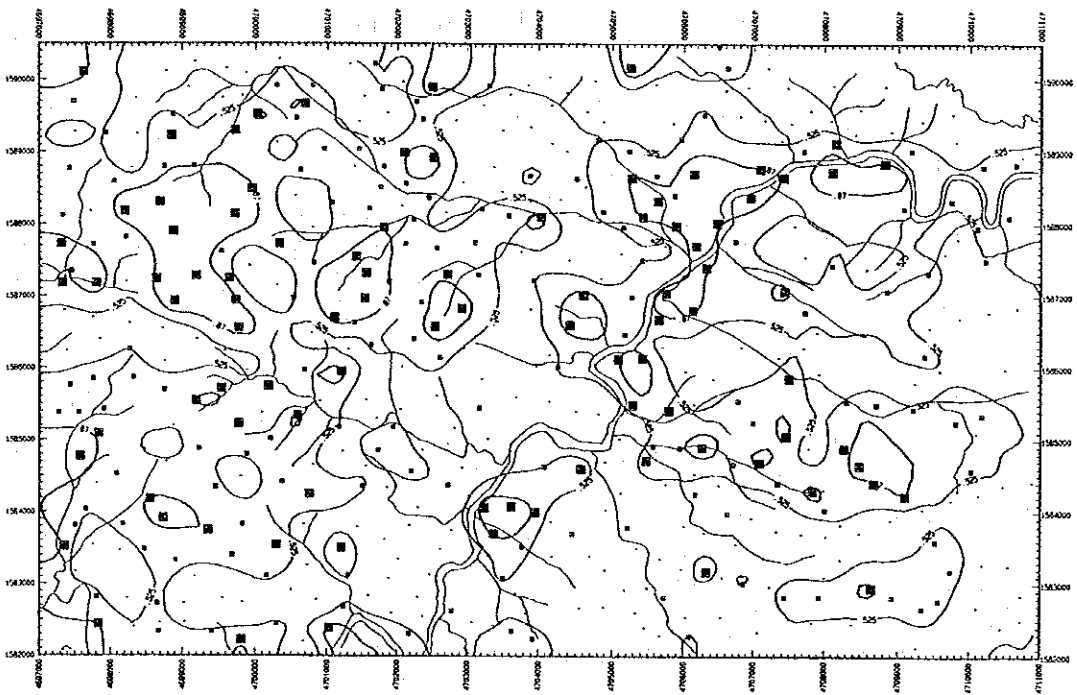


Soil



Hg

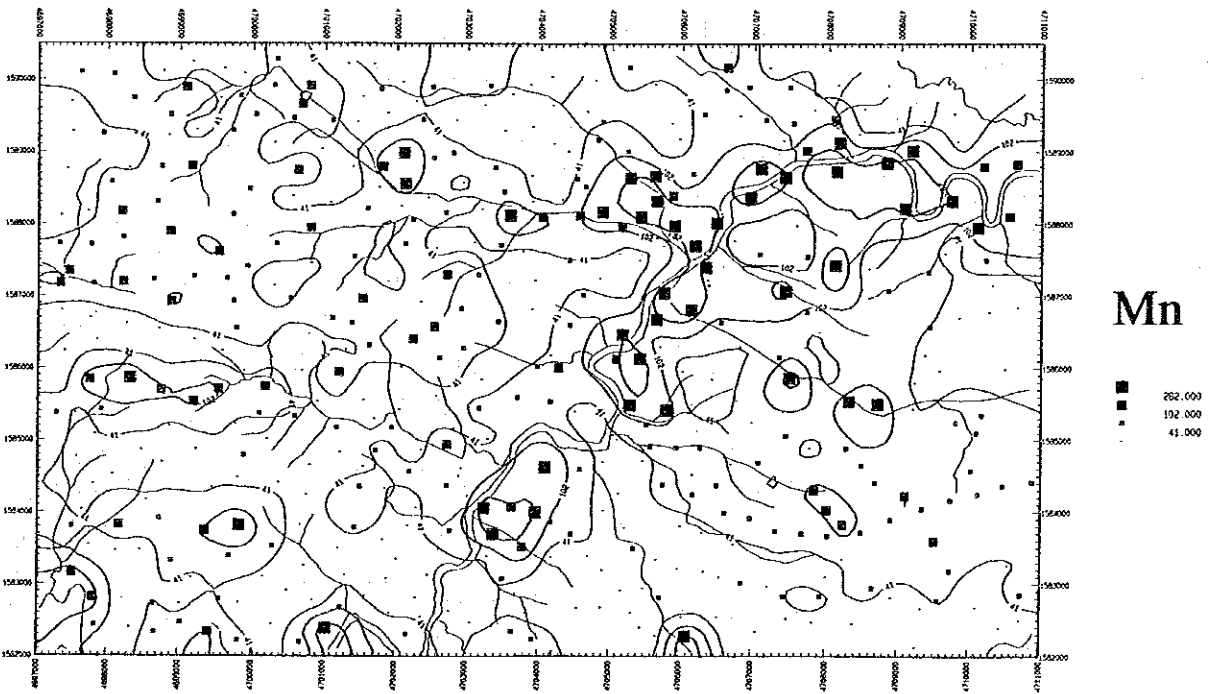
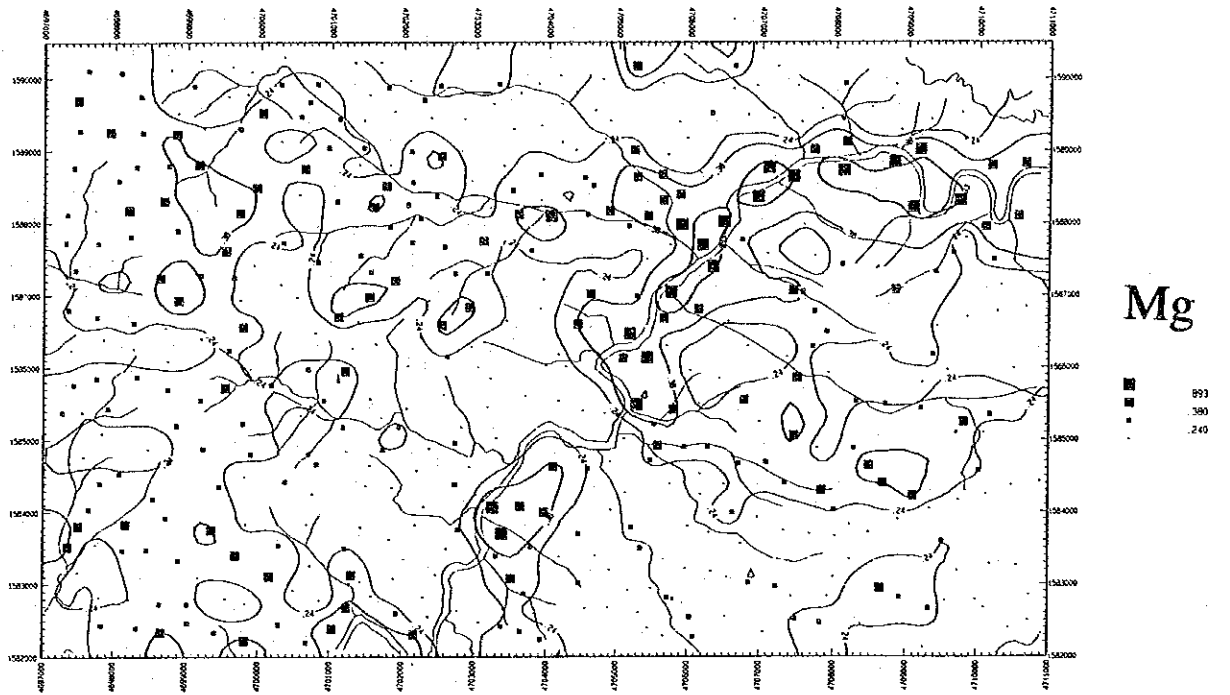
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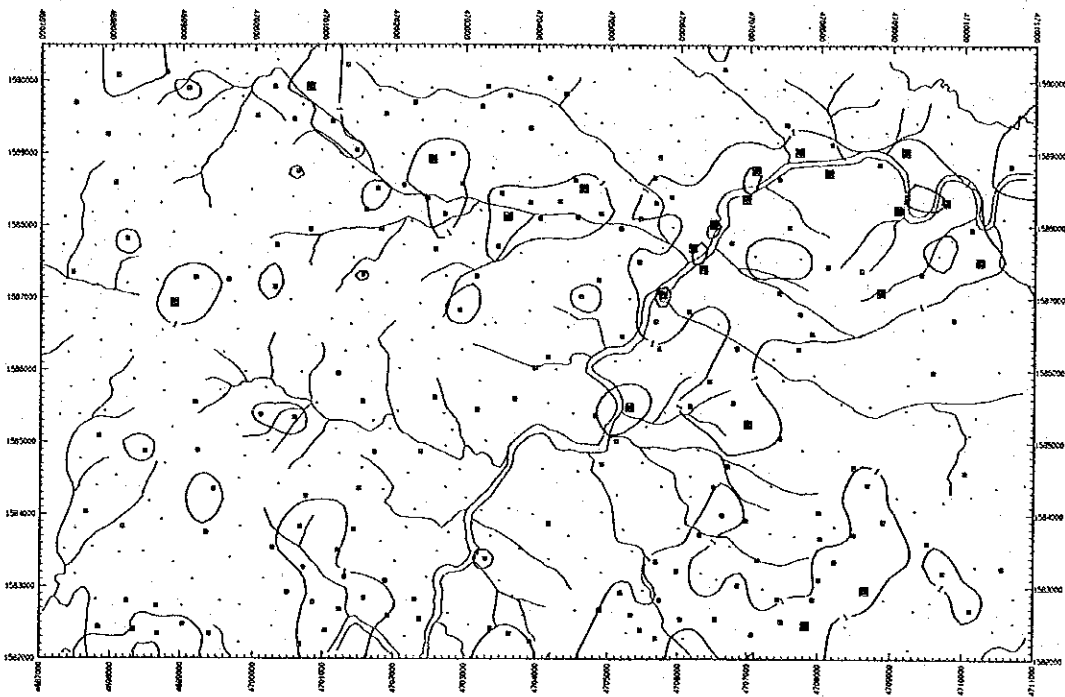
K

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- 525

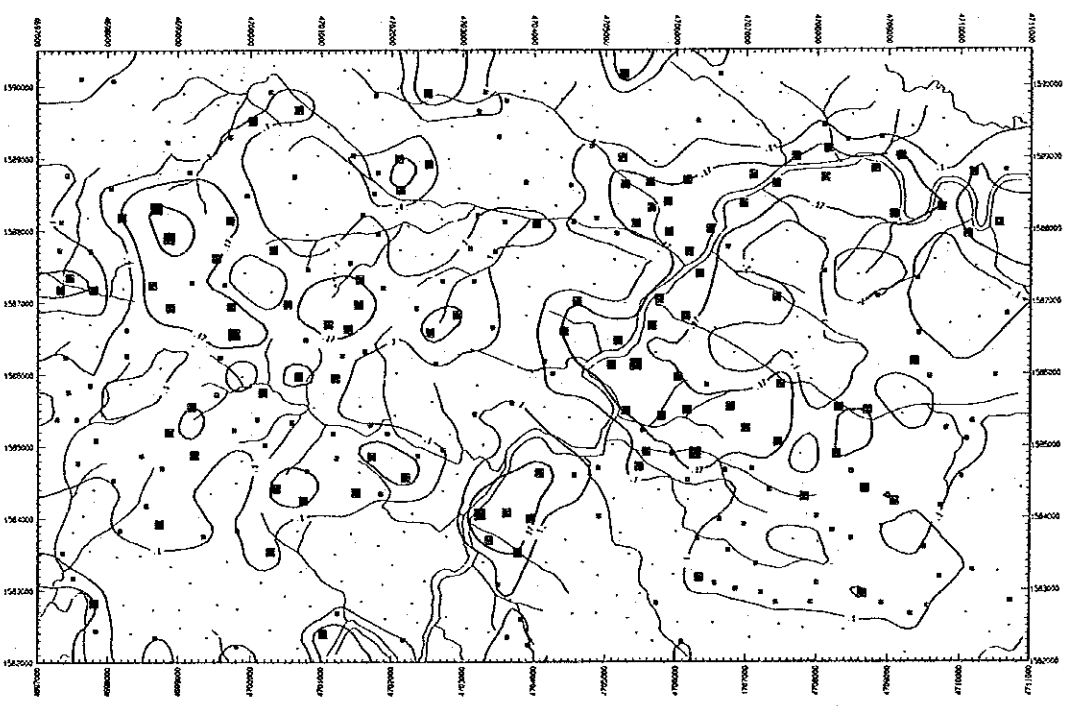
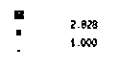
Soil



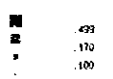
Soil



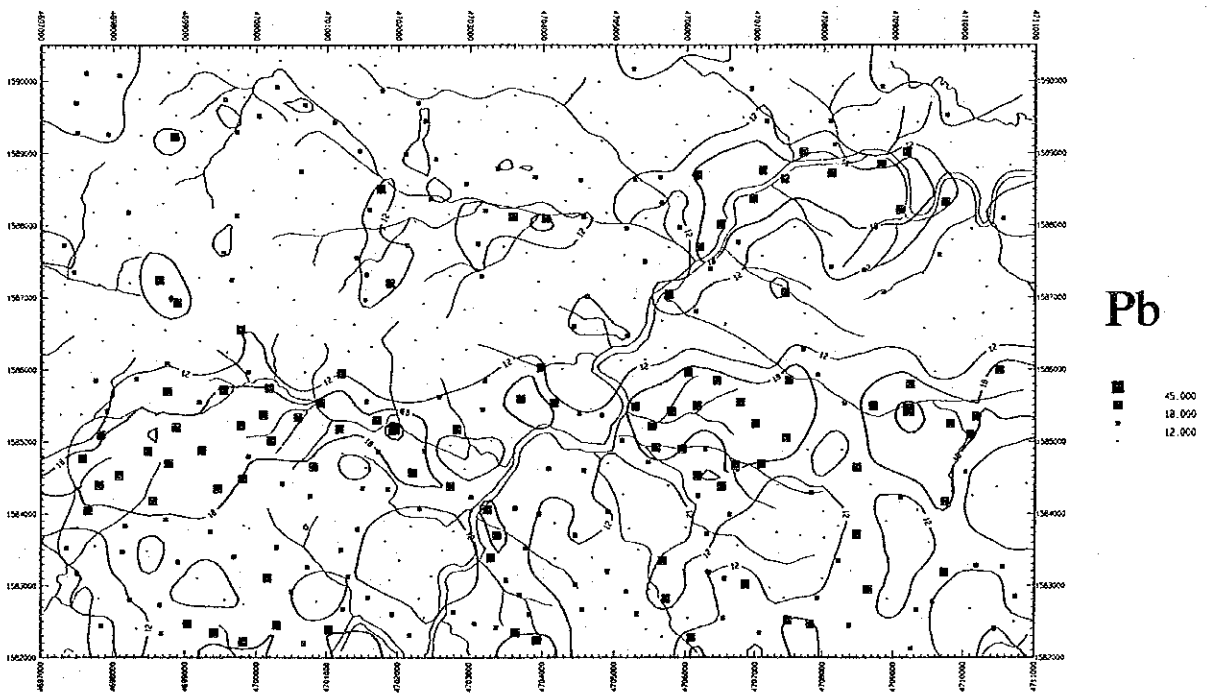
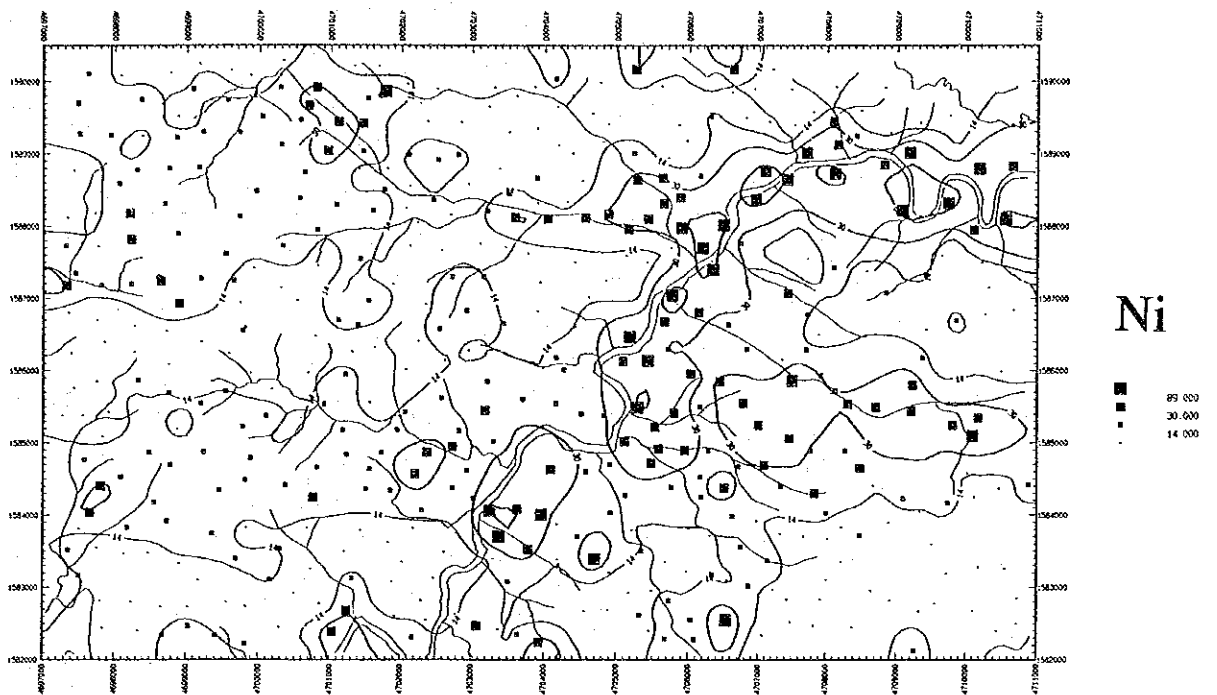
Mo



Na

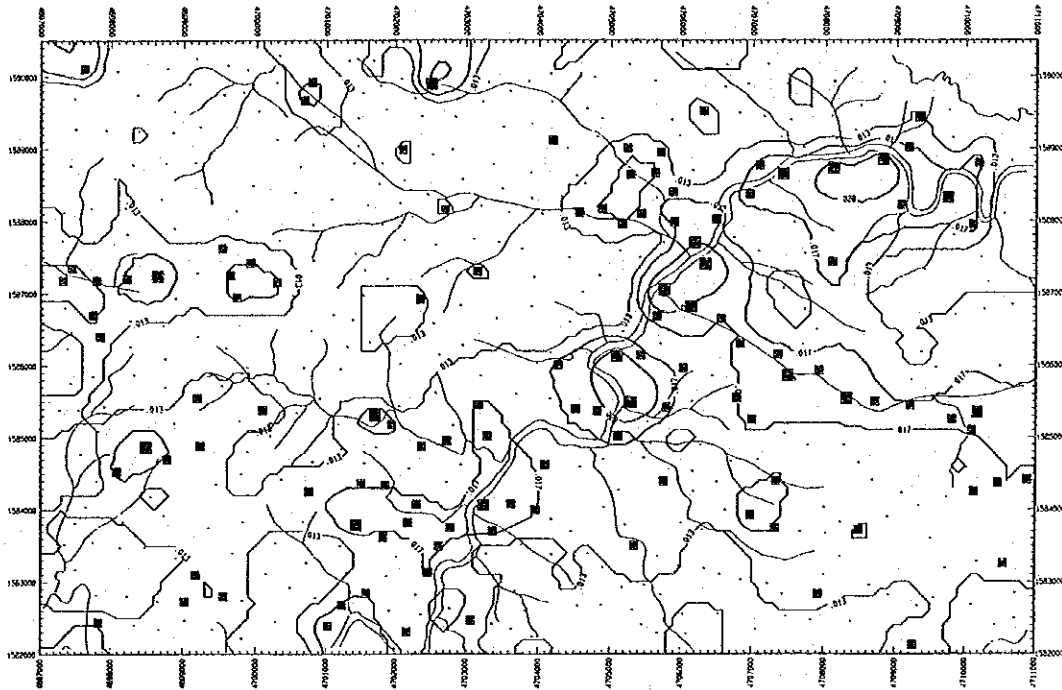


Soil



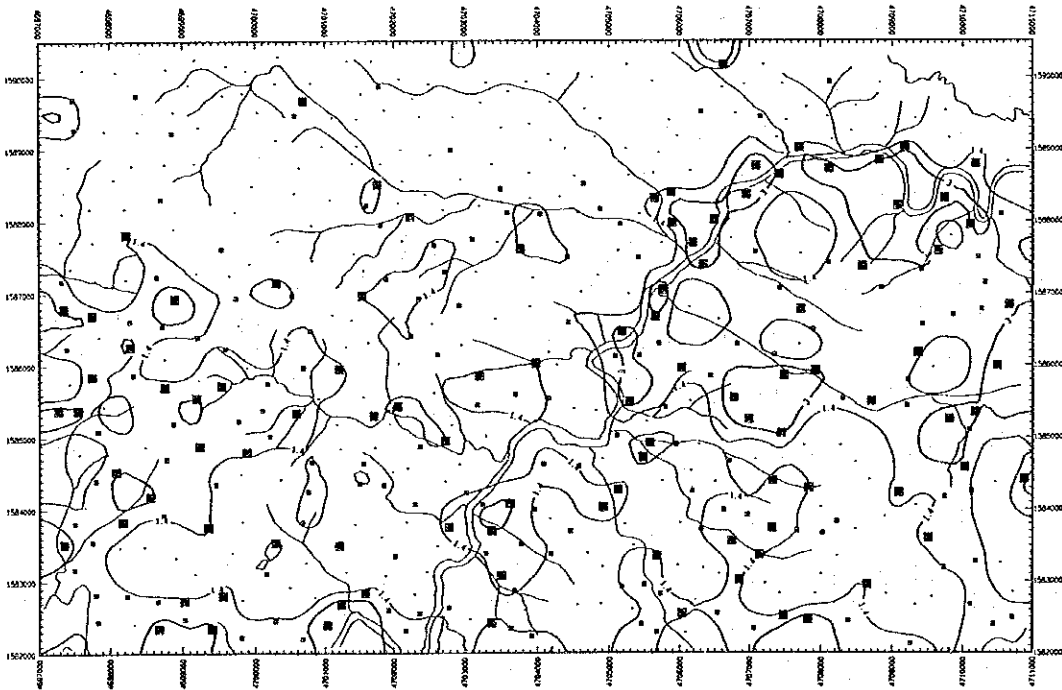


Soil



S

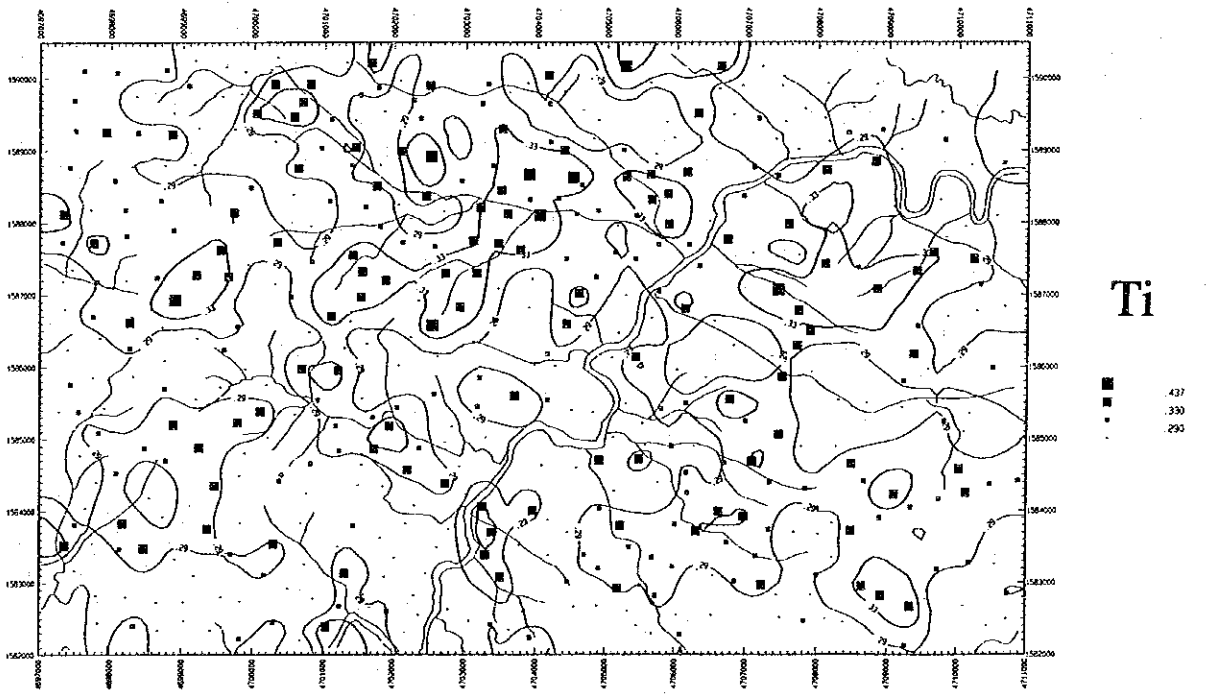
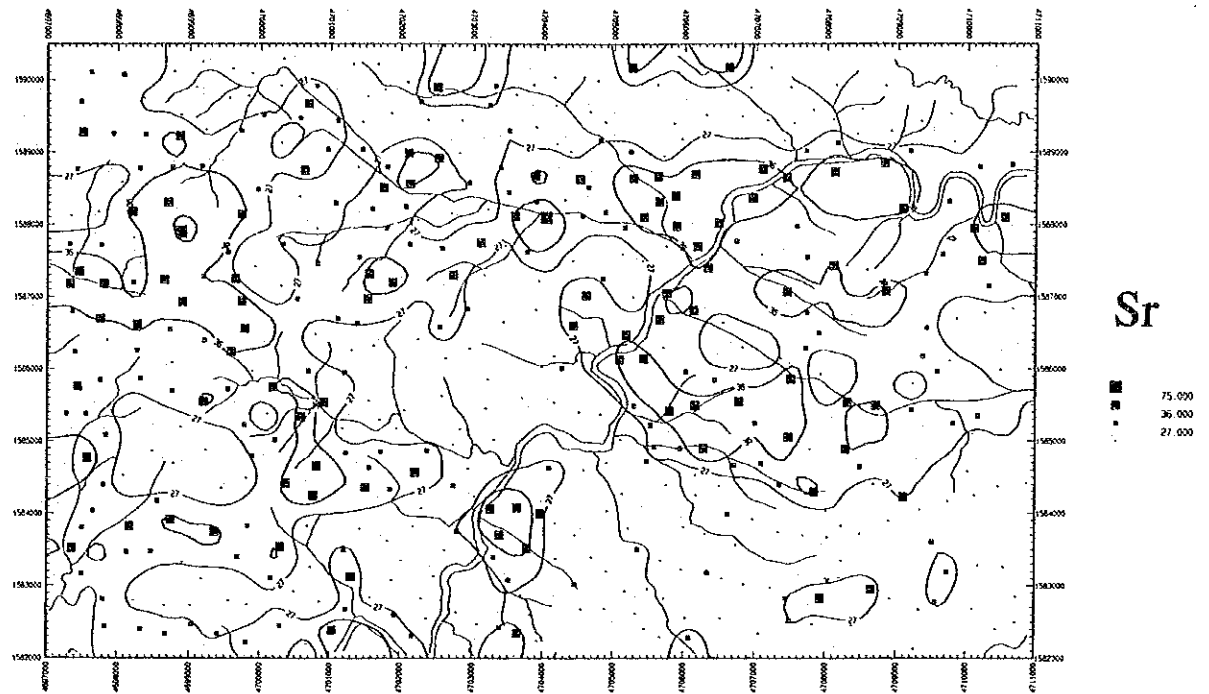
■  
□  
○  
0.02  
0.17  
0.13



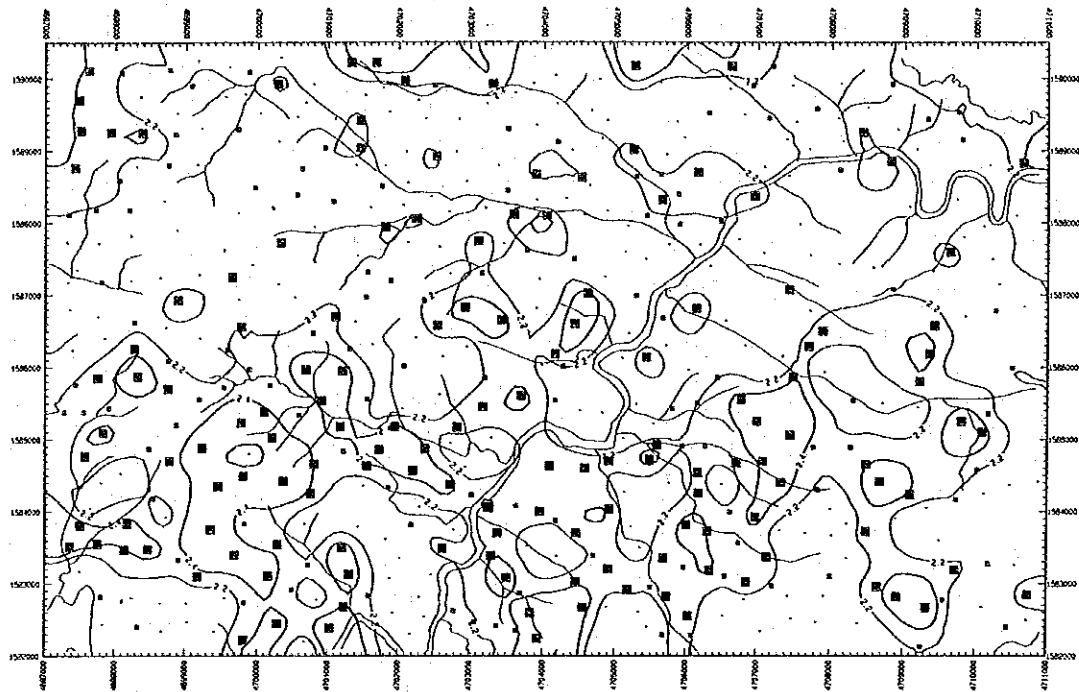
Sb

■  
□  
○  
3.000  
1.400

Soil

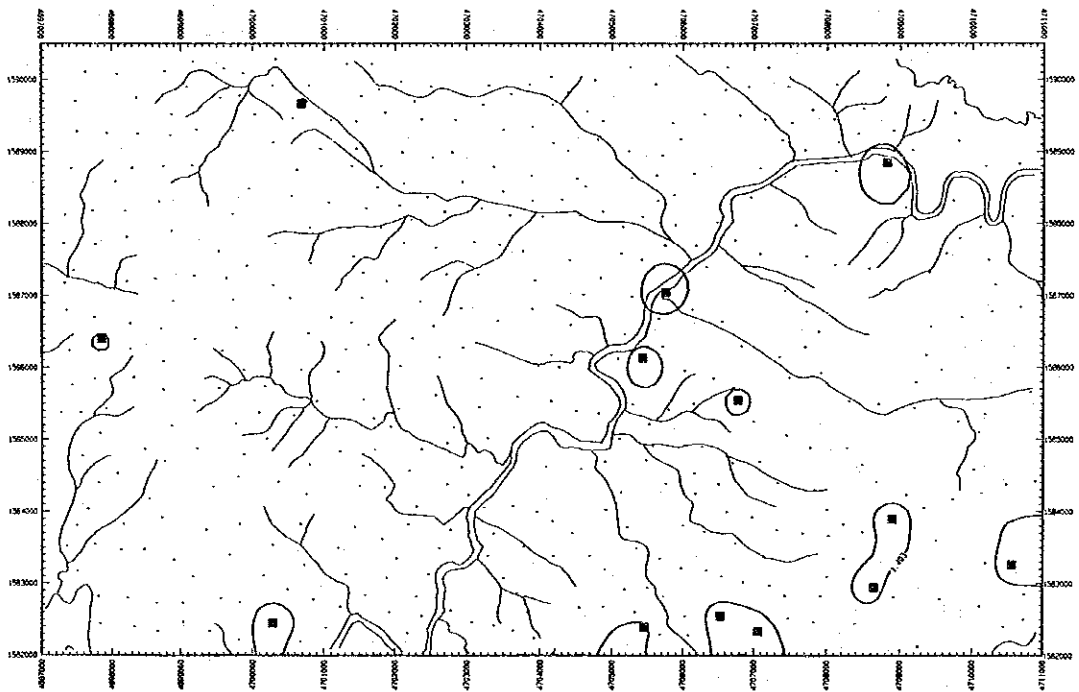


Soil



U

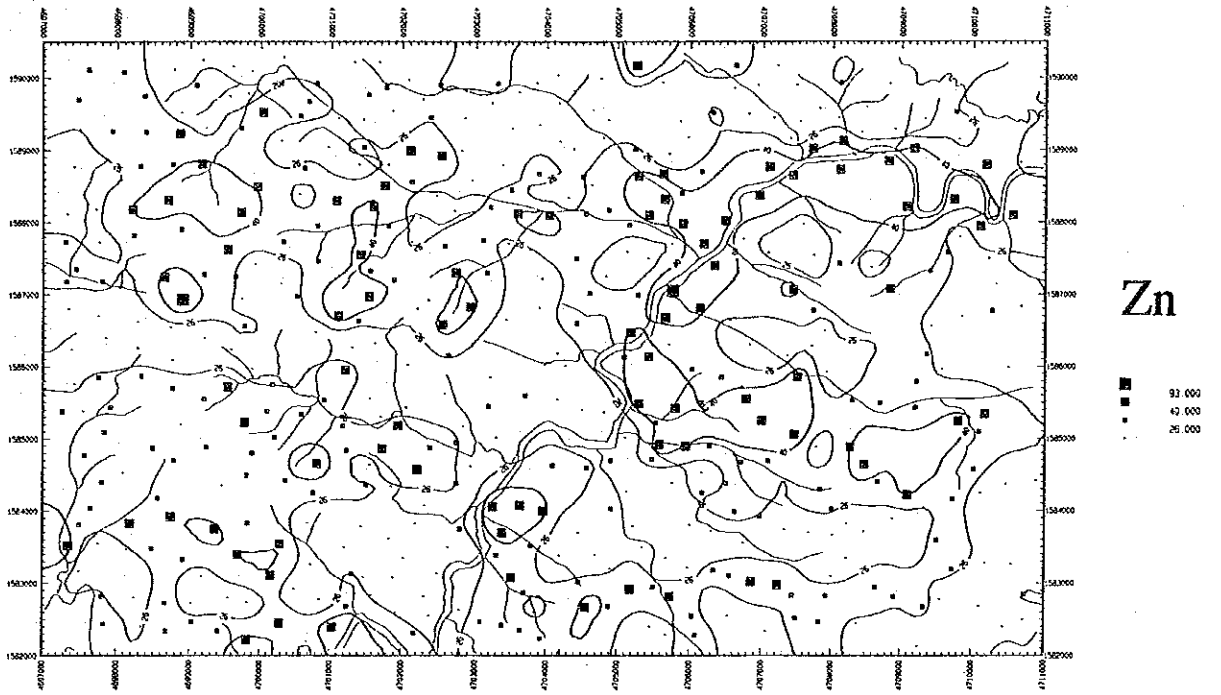
■ 2.400  
□ 2.200



W

■ 1.403

Soil





Appendix 13

List of soil geochemical samples in Area N



Area: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile			G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E						0-50	50-100	100-150					
1	LN001	1521.54	4685.45	—	Pr	B	50	Y.B.	A	B		R	C	F	W	sec. forest
2	LN002	1521.04	4685.45	—	Pr	B	50	Y.B.	A	B		R	C	F	W	sec. forest
3	LN003	1521.55	4685.95	—	Pr	B	50	B.	A	B		R	C	S	W	sec. forest
4	LN004	1521.00	4686.00	—	Pr	B	50	B.	A	B		R	C	F	W	sec. forest
5	LN005	1521.28	4685.70	—	Pr	B	50	Y.B.	A	B		F	C	F	W	sec. forest
6	LN006	1519.10	4687.53	—	Pr	B	50	B.	A	B		R	C	M	W	sec. forest
7	LN007	1519.32	4687.33	—	Pr	B	50	R.B.	A	B		R	C	S	D	sec. forest
8	LN008	1519.35	4687.80	—	Pr	B	50	R.B.	A	B		R	C	M	W	sec. forest
9	LN009	1519.75	4687.78	—	Pr	B	50	Y.	A	B		R	C	S	W	sec. forest
10	LN010	1519.78	4688.22	—	Pr	B	50	B.	A	B		R	C	M	D	sec. forest
11	LN011	1521.55	4688.03	—	Q <sub>1</sub>	B	50	Y.B.	A	B		M	C	F	W	sec. forest
12	LN012	1521.00	4688.01	—	Q <sub>2</sub>	B	50	B.		B		F	C	F	W	sec. forest
13	LN013	1521.30	4688.30	—	Q <sub>2</sub>	B	50	R.B.	A	B		M	C	M	W	sec. forest
14	LN014	1521.86	4688.40	—	Pr	B	50	D.B.		B		R	C	M	W	sec. forest
15	LN015	1521.65	4688.53	—	Pr	B	50	Y.B.	A	B		R	C	M	W	sec. forest
16	LN016	1521.35	4688.72	—	Pr	B	50	D.B.		B		R	C	S	W	sec. forest
17	LN017	1520.93	4688.60	—	Pr	B	50	D.B.	A	B		R	C	S	W	sec. forest
18	LN018	1521.89	4688.85	—	Pr	B	30	D.B.	A	B		F	C	S	W	sec. forest
19	LN019	1521.56	4688.98	harzburgite	Pr	B	50	R.B.	A	B		F	C	F	D	sec. forest
20	LN020	1520.99	4688.97	—	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: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile	G. #1	S. #2	T. #3	H. #4	Vegetation
21	LN021	1521.85	4689.23	—	Pr	B	30	D.B.	A B	R	C	S	W	sec. forest
22	LN022	1521.50	4689.47	—	Pr	B	50	B.	A B	R	C	M	W	sec. forest
23	LN023	1521.20	4689.28	—	Pr	B	50	R.B.	A B	F	C	M	W	sec. forest
24	LN024	1520.98	4689.48	—	Cs	B	50	D.B.	A B	M	S	F	W	sec. forest
25	LN025	1520.95	4691.88	—	Cs	B	50	Y.B.	A B	R	C	F	W	sec. forest
26	LN026	1520.52	4691.89	—	Pr	B	50	D.B.	A B	R	C	F	W	sec. forest
27	LN027	1519.95	4691.73	—	Pr	B	50	D.B.	B	R	C	S	W	sec. forest
28	LN028	1519.32	4690.75	—	Pr	B	50	D.B.	A B	R	C	S	W	sec. forest
29	LN029	1519.27	4690.24	—	Pr	B	50	D.B.	A B	R	C	S	W	sec. forest
30	LN030	1519.25	4689.21	—	Pr	B	50	Y.B.	A B	F	C	S	W	sec. forest
31	LN031	1520.80	4691.50	—	Cs	B	50	B.	B	R	C	F	W	sec. forest
32	LN032	1520.23	4685.26	—	Cs	B	50	Y.B.	A B	R	C	S	W	sec. forest
33	LN033	1520.54	4685.49	harzburgite	Pr	B	50	B.	A B	F	C	F	W	sec. forest
34	LN034	1520.05	4685.53	—	Pr	B	50	B.	A B	R	C	F	W	sec. forest
35	LN035	1520.74	4685.72	—	Pr	B	50	Y.B.	A B	M	C	F	W	sec. forest
36	LN036	1520.30	4685.72	—	Q <sub>1</sub>	B	50	L.B.	A B	R	C	F	W	sec. forest
37	LN037	1520.53	4686.02	—	Q <sub>1</sub>	B	50	B.	A B	R	C	F	W	sec. forest
38	LN038	1520.00	4685.98	—	Q <sub>1</sub>	B	50	Y.B.	A B	R	C	F	W	sec. forest
39	LN039	1521.23	4689.00	—	Pr	B	50	R.B.	A B	R	C	S	D	sec. forest
40	LN040	1520.00	4686.55	—	Cs	B	50	Y.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: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates N	Coordinates E	Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile	G. *1	S. *2	T. *3	H. *4	Vegetation
41	LN041	1521.50	4689.25	—	Pr	B	50	R.B.	A B	R	C	S	D	sec. forest
42	LN042	1520.07	4687.00	—	Cs	B	50	Y.B.	A B	R	C	S	W	sec. forest
43	LN043	1521.60	4688.71	—	Pr	B	50	R.B.	A B	R	C	S	W	sec. forest
44	LN044	1520.00	4686.56	—	Pr	B	50	B.	A B	R	C	F	W	sec. forest
45	LN045	1520.53	4688.01	—	Q <sub>2</sub>	B	50	R.B.	A B	R	C	F	W	sec. forest
46	LN046	1520.00	4688.00	—	Pr	B	50	Y.	A B	R	C	S	W	sec. forest
47	LN047	1520.77	4688.24	—	Q <sub>2</sub>	B	50	D.B.	A B	F	C	M	W	sec. forest
48	LN048	1520.25	4688.30	—	Pr	B	50	B.	A B	R	C	S	W	sec. forest
49	LN049	1520.45	4688.53	—	Pr	B	50	R.B.	A B	R	C	S	D	sec. forest
50	LN050	1519.99	4688.48	—	Pr	B	50	R.B.	A B	R	C	M	D	sec. forest
51	LN051	1520.81	4688.80	—	Pr	B	50	R.B.	A B	R	C	M	D	sec. forest
52	LN052	1520.48	4688.98	—	Pr	B	50	L.B.	A B	M	C	F	W	sec. forest
53	LN053	1520.10	4689.02	—	Cs	B	50	B.	A B	R	C	F	W	sec. forest
54	LN054	1520.74	4689.27	—	Cs	B	50	B.	A B	R	C	F	W	sec. forest
55	LN055	1520.47	4689.52	—	Cs	B	50	D.B.	A B	M	C	F	W	sec. forest
56	LN056	1520.02	4689.47	—	Cs	B	50	D.B.	A B	R	C	F	W	sec. forest
57	LN057	1520.70	4688.53	—	Pr	B	50	D.B.	A B	R	C	S	W	sec. forest
58	LN058	1519.93	4689.97	—	Pr	B	50	Y.B.	A B	R	C	F	W	sec. forest
59	LN059	1520.22	4690.32	—	Cs	B	50	D.B.	B	R	C	F	W	sec. forest
60	LN060	1520.38	4690.54	—	Cs	B	50	D.B.	B	F	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: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile			G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E						50	100	150 (cm)					
61	LN061	1519.97	4690.50	—	Pr	B	50	Y.B.	A	B		R	C	F	W	sec. forest
62	LN062	1520.23	4690.77	—	Cs	B	50	D.B.	A	B		R	C	F	W	sec. forest
63	LN063	1520.90	4691.00	—	Cs	B	50	D.B.		B		R	C	F	W	bush
64	LN064	1520.43	4690.98	—	Cs	B	50	D.B.		B		F	S	F	W	bush
65	LN065	1520.52	4691.45	—	Cs	B	50	D.B.		B		R	C	F	W	sec. forest
66	LN066	1520.12	4691.43	—	Pr	B	50	D.B.	A	B		R	C	F	W	sec. forest
67	LN067	1519.58	4685.53	—	Cs	B	50	Y.B.	A	B		R	C	F	W	sec. forest
68	LN068	1519.52	4685.93	—	Q <sub>1</sub>	B	50	L.B.	A	B		R	C	F	W	sec. forest
69	LN069	1519.55	4686.54	—	Cs	B	50	B.	A	B		R	C	F	W	sec. forest
70	LN070	1519.53	4687.03	chert boulder	Cs	B	50	R.B.	A	B		M	C	S	W	sec. forest
71	LN071	1519.62	4687.55	—	Pr	B	50	R.B.	A	B		R	C	S	W	sec. forest
72	LN072	1519.58	4687.99	—	Pr	B	50	B.	A	B		R	C	S	D	sec. forest
73	LN073	1519.65	4688.45	—	Cs	B	50	D.B.	A	B		R	C	F	W	sec. forest
74	LN074	1519.70	4688.69	—	Cs	B	50	D.B.		B		R	C	F	W	sec. forest
75	LN075	1519.55	4689.00	—	Pr	B	50	D.B.	A	B		R	C	M	W	sec. forest
76	LN076	1519.65	4689.32	—	Pr	B	50	D.B.	A	B		R	C	S	W	sec. forest
77	LN077	1519.42	4689.53	—	Pr	B	50	D.B.		B		R	C	S	W	sec. forest
78	LN078	1519.75	4689.74	—	Pr	B	50	D.B.		B		R	C	S	W	sec. forest
79	LN079	1519.50	4689.98	—	Pr	B	50	D.B.		B		R	C	S	W	sec. forest
80	LN080	1519.73	4690.25	—	Pr	B	50	D.B.		B		F	C	S	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: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile			G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E						50	100	150 (cm)					
81	LN081	1519.50	4690.45	peridotite	Pr	B	50	D.B.	A	B		R	C	S	W	sec. forest
82	LN082	1519.77	4690.77	peridotite	Pr	B	50	D.B.		B		R	C	F	W	sec. forest
83	LN083	1519.90	4691.02	peridotite	Pr	B	50	D.B.	A	B		R	C	F	W	sec. forest
84	LN084	1519.55	4690.98	---	Pr	B	50	D.B.		B		R	C	S	W	sec. forest
85	LN085	1519.45	4691.55	---	Cs	B	50	D.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).  
 \*\* Humidity: dry (D), wet (W).

Area: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile				G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E						50	100	150	(cm)					
86	LN201	1521.54	4685.45	---	Pr	C	150	Y.B.	A	B	C	M	C	F	W	sec. forest	
87	LN202	1521.04	4685.45	---	Pr	B	150	Y.B.	A	B		R	C	F	W	sec. forest	
88	LN203	1521.55	4685.95	---	Pr	B	150	B.	A	B		F	C	S	W	sec. forest	
89	LN204	1521.00	4686.00	---	Pr	B	150	B.	A	B		R	C	F	W	sec. forest	
90	LN205	1521.28	4685.70	---	Pr	B	150	Y.B.	A	B		R	C	F	W	sec. forest	
91	LN206	1519.10	4687.53	---	Pr	B	150	B.	A	B		R	C	M	W	sec. forest	
92	LN207	1519.32	4687.33	---	Pr	B	150	R.B.	A	B		R	C	S	D	sec. forest	
93	LN208	1519.35	4687.80	---	Pr	B	150	R.B.	A	B		R	C	M	W	sec. forest	
94	LN209	1519.75	4687.78	---	Pr	B	150	Y.	A	B		R	C	S	W	sec. forest	
95	LN210	1519.78	4688.22	---	Pr	B	150	B.	A	B		R	C	S	D	sec. forest	
96	LN211	1521.55	4688.03	---	Q <sub>1</sub>	C	90	R.B.	A	B	C	M	C	F	W	sec. forest	
97	LN212	1521.00	4688.01	---	Q <sub>2</sub>	B	150	B.		B		F	C	F	W	sec. forest	
98	LN213	1521.30	4688.30	---	Q <sub>2</sub>	B	150	R.B.	A	B		R	C	M	W	sec. forest	
99	LN214	1521.86	4688.40	---	Pr	B	150	D.B.		B		R	C	M	W	sec. forest	
100	LN215	1521.65	4688.53	---	Pr	B	150	Y.B.	A	B		R	C	M	W	sec. forest	
101	LN216	1521.35	4688.72	---	Pr	B	150	D.B.		B		R	C	S	W	sec. forest	
102	LN217	1520.93	4688.60	---	Pr	B	150	D.B.	A	B		F	C	S	W	sec. forest	
103	LN218	1521.89	4688.85	---	Pr	C	110	D.B.	A	B	C	M	C	S	W	sec. forest	
104	LN219	1521.56	4688.98	harzburgite	Pr	C	110	R.B.	A	B	C	F	C	F	D	sec. forest	
105	LN220	1520.99	4688.97	---	Pr	B	150	D.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: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile				G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E						50	100	150	(cm)					
106	LN221	1521.85	4689.23	---	Pr	C	100	Y.B.	A	B	C		M	S	S	W	sec. forest
107	LN222	1521.50	4689.47	---	Pr	B	150	D.B.	A	B			R	C	M	W	sec. forest
108	LN223	1521.20	4689.28	---	Pr	C	110	R.B.	A	B	C		F	C	M	W	sec. forest
109	LN224	1520.98	4689.48	---	Cs	B	150	B.	A		B		M	C	F	W	sec. forest
110	LN225	1520.95	4691.88	---	Cs	B	150	Y.B.	A		B		R	C	F	W	sec. forest
111	LN226	1520.52	4691.89	---	Pr	B	150	D.B.	A		B		R	C	F	W	sec. forest
112	LN227	1519.95	4691.73	---	Pr	B	150	D.B.			B		R	C	S	W	sec. forest
113	LN228	1519.32	4690.75	---	Pr	B	150	D.B.	A		B		R	C	S	W	sec. forest
114	LN229	1519.27	4690.24	---	Pr	C	100	Y.B.	A	B	C		R	C	S	W	sec. forest
115	LN230	1519.25	4689.21	---	Pr	C	150	Y.B.	A		B	C	M	S	S	W	sec. forest
116	LN231	1520.80	4691.50	---	Cs	B	150	R.B.			B		R	C	F	W	sec. forest
117	LN232	1520.23	4685.26	---	Cs	C	150	Y.B.	A	B	C		M	C	S	W	sec. forest
118	LN233	1520.54	4685.49	harzburgite	Pr	B	150	B.	A		B		R	C	F	W	sec. forest
119	LN234	1520.05	4685.53	---	Pr	B	150	B.	A		B		R	S	F	W	sec. forest
120	LN235	1520.74	4685.72	---	Pr	B	150	Y.B.	A		B		M	C	F	W	sec. forest
121	LN236	1520.30	4685.72	---	Q <sub>1</sub>	C	150	L.B.	A	B	C		R	S	F	W	sec. forest
122	LN237	1520.53	4686.02	---	Q <sub>1</sub>	B	150	B.	A		B		R	C	F	W	sec. forest
123	LN238	1520.00	4685.98	---	Q <sub>1</sub>	B	150	Y.B.	A		B		R	C	F	W	sec. forest
124	LN239	1521.23	4689.00	---	Pr	B	150	R.B.	A		B		R	C	S	D	sec. forest
125	LN240	1520.00	4686.55	---	Cs	C	150	Y.B.	A		B	C	M	S	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: West of Telupid (Area N)

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	Vegetation
126	LN241	1521.50	4689.25	—	Pr	B	150	R.B.	A B	F	C	S	D	sec. forest
127	LN242	1520.07	4687.00	—	Cs	B	150	Y.B.	A B	R	C	S	W	sec. forest
128	LN243	1521.60	4688.71	—	Pr	B	150	R.B.	A B	R	C	S	W	sec. forest
129	LN244	1520.00	4687.55	—	Pr	B	150	B.	A B	R	C	F	W	sec. forest
130	LN245	1520.53	4688.01	—	Q <sub>2</sub>	B	150	R.B.	A B	R	C	F	W	sec. forest
131	LN246	1520.00	4688.00	—	Pr	B	150	Y.	A B	R	C	S	W	sec. forest
132	LN247	1520.77	4688.24	—	Q <sub>2</sub>	C	120	D.B.	A B C	F	C	M	W	sec. forest
133	LN248	1520.25	4688.30	—	Pr	B	150	B.	A B	R	C	S	W	sec. forest
134	LN249	1520.45	4688.53	—	Pr	C	100	B.	A B C	F	C	S	D	sec. forest
135	LN250	1519.99	4688.48	—	Pr	B	150	R.B.	A B	R	C	M	D	sec. forest
136	LN251	1520.81	4688.80	—	Pr	B	150	R.B.	A B	R	C	M	D	sec. forest
137	LN252	1520.48	4688.98	—	Pr	B	150	L.B.	A B C	M	C	F	W	sec. forest
138	LN253	1520.10	4689.02	—	Cs	C	150	B.	A B C	M	C	F	W	sec. forest
139	LN254	1520.74	4689.27	—	Cs	B	150	B.	A B	M	C	F	W	sec. forest
140	LN255	1520.47	4689.52	—	Cs	B	150	D.B.	A B	M	C	F	W	sec. forest
141	LN256	1520.02	4689.47	—	Cs	B	150	R.B.	A B	F	C	F	W	sec. forest
142	LN257	1520.70	4688.53	—	Pr	C	150	D.B.	A B C	M	C	S	W	sec. forest
143	LN258	1519.93	4689.97	—	Pr	B	150	Y.B.	A B	R	C	F	W	sec. forest
144	LN259	1520.22	4690.32	—	Cs	B	150	D.B.	A B	F	C	F	W	sec. forest
145	LN260	1520.38	4690.54	—	Cs	B	150	Y.B.	A B	F	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: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (cm)				G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E						50	100	150						
146	LN261	1519.97	4690.50	—	Pr	B	150	Y.B.					F	C	F	W	sec. forest
147	LN262	1520.23	4690.77	—	Cs	B	150	D.B.					M	C	F	W	sec. forest
148	LN263	1520.90	4691.00	—	Cs	B	110	D.B.					R	C	F	W	sec. forest
149	LN264	1520.43	4690.98	—	Cs	B	100	D.B.					F	S	F	W	sec. forest
150	LN265	1520.52	4691.45	—	Cs	B	150	D.B.					R	C	F	W	sec. forest
151	LN266	1520.12	4691.43	—	Pr	B	150	D.B.					R	C	F	W	sec. forest
152	LN267	1519.58	4685.53	—	Cs	B	150	L.B.					R	C	F	W	sec. forest
153	LN268	1519.52	4685.93	—	Q <sub>1</sub>	B	150	L.B.					R	C	F	W	sec. forest
154	LN269	1519.55	4686.54	—	Cs	B	150	B.					R	C	F	W	sec. forest
155	LN270	1519.53	4687.03	chert boulder	Cs	B	150	R.B.					F	C	S	W	sec. forest
156	LN271	1519.62	4687.55	—	Pr	B	150	R.B.					R	C	S	W	sec. forest
157	LN272	1519.58	4687.99	—	Pr	B	150	B.					R	C	S	D	sec. forest
158	LN273	1519.65	4688.45	—	Cs	B	150	B.					R	C	F	W	sec. forest
159	LN274	1519.70	4688.69	—	Cs	B	150	D.B.					R	C	F	W	sec. forest
160	LN275	1519.55	4689.00	—	Pr	B	150	D.B.					R	C	M	W	sec. forest
161	LN276	1519.65	4689.32	—	Pr	B	150	D.B.					F	C	S	W	sec. forest
162	LN277	1519.42	4689.53	—	Pr	B	150	Y.B.					F	C	S	W	sec. forest
163	LN278	1519.75	4689.74	—	Pr	C	130	Y.B.					M	S	S	W	sec. forest
164	LN279	1519.50	4689.98	—	Pr	B	150	D.B.					F	C	S	W	sec. forest
165	LN280	1519.73	4690.25	—	Pr	B	150	D.B.					F	C	S	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).  
 \*\* Humidity: dry (D), wet (W).



## Area: West of Telupid (Area N)

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile			G <sub>1</sub> <sup>*1</sup>	S <sub>2</sub> <sup>*2</sup>	T <sub>3</sub> <sup>*3</sup>	H <sub>4</sub> <sup>*4</sup>	Vegetation
		N	E						50	100	150 (cm)					
166	LN281	1519.50	4690.45	peridotite	Pr	B	150	D.B.	A	B		R	C	S	W	sec. forest
167	LN282	1519.77	4690.77	peridotite	Pr	B	150	R.B.		B		F	C	F	W	sec. forest
168	LN283	1519.90	4691.02	peridotite	Pr	B	150	D.B.	A	B		F	C	F	W	sec. forest
169	LN284	1519.55	4690.98	—	Pr	B	150	D.B.		B		R	C	S	W	sec. forest
170	LN285	1519.45	4691.55	—	Cs	B	150	Y.B.	A	B		F	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 14

Analytical results of soil geochemical  
samples in Area N



List of Geochemical Analysis( 1)

Ser. Sample No.	Location (km)	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
1 LN001	4685.450 1521.540	8.34	11	153	5.93	34
2 LN002	4685.450 1521.040	10.46	12	199	9.99	41
3 LN003	4685.950 1521.550	12.50	31	170	12.12	68
4 LN004	4686.000 1521.000	13.18	12	398	13.79	76
5 LN005	4685.700 1521.280	11.21	11	212	10.47	42
6 LN006	4687.530 1519.100	11.73	67	3137	21.55	1709
7 LN007	4687.330 1519.320	4.37	353	8986	40.91	4595
8 LN008	4687.800 1519.350	3.80	391	10214	40.82	6145
9 LN009	4687.780 1519.750	15.60	19	988	9.46	401
10 LN010	4688.220 1519.780	9.70	81	3425	21.68	2377
11 LN011	4688.030 1521.550	3.67	5	50	2.70	11
12 LN012	4688.010 1521.000	12.06	31	593	10.84	280
13 LN013	4688.300 1521.300	11.99	35	183	10.70	85
14 LN014	4688.400 1521.860	3.73	523	12437	41.97	6986
15 LN015	4688.530 1521.650	2.34	1046	11937	40.13	8354
16 LN016	4688.720 1521.350	2.66	778	12749	36.14	8383
17 LN017	4688.600 1520.930	1.44	409	6775	24.80	7746
18 LN018	4688.850 1521.890	84	283	1895	14.38	4093
19 LN019	4688.980 1521.560	1.97	653	7522	38.27	13114
20 LN020	4688.970 1520.990	2.48	638	7231	36.07	5835
21 LN021	4689.230 1521.850	1.85	733	8155	32.51	6293
22 LN022	4689.470 1521.500	9.12	201	1293	11.03	540
23 LN023	4689.280 1521.200	2.84	531	7875	31.36	6936
24 LN024	4689.480 1520.980	4.61	481	12844	12.41	1249
25 LN025	4691.880 1520.950	7.04	13	650	5.33	93
26 LN026	4691.890 1520.520	7.19	237	9407	28.86	2295
27 LN027	4691.730 1519.950	3.44	429	5018	18.73	2284
28 LN028	4690.750 1519.320	5.08	357	8772	35.47	3771
29 LN029	4690.240 1519.270	5.64	468	6366	27.80	3361
30 LN030	4689.210 1519.250	7.40	40	553	5.98	408
31 LN031	4691.500 1520.800	11.63	54	233	13.83	291
32 LN032	4685.260 1520.230	8.77	15	184	6.58	41
33 LN033	4685.490 1520.540	7.72	73	3154	14.79	605
34 LN034	4685.530 1520.050	12.54	16	109	13.47	29
35 LN035	4685.720 1520.740	10.77	12	174	10.45	38
36 LN036	4685.720 1520.300	9.32	34	133	9.08	31
37 LN037	4686.020 1520.530	12.48	28	199	13.74	55
38 LN038	4685.980 1520.000	13.43	56	203	11.58	65
39 LN039	4689.000 1521.230	3.33	565	7135	38.61	5971
40 LN040	4686.550 1520.000	12.90	27	778	10.53	232
41 LN041	4689.250 1521.500	2.52	741	8280	40.87	10395
42 LN042	4687.000 1520.070	13.35	45	1175	13.34	394
43 LN043	4688.710 1521.600	12.33	65	2893	15.89	525
44 LN044	4687.550 1520.000	14.20	84	374	14.80	134
45 LN045	4688.010 1520.530	10.86	23	71	6.88	38
46 LN046	4688.000 1520.000	17.27	16	936	6.40	267
47 LN047	4688.240 1520.770	2.61	517	5559	33.49	8372
48 LN048	4688.300 1520.250	13.23	155	3385	22.23	2057
49 LN049	4688.530 1520.450	2.52	555	6792	33.90	10375
50 LN050	4688.480 1519.990	6.73	286	7330	38.88	5453

List of Geochemical Analysis( 2)

Ser. No.	Sample No.	X-coord	Y-coord	Location (km)	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
51	LN051	4688.800	1520.810		2.86	396	8325	39.65	6399
52	LN052	4688.980	1520.480		13.44	24	520	12.17	100
53	LN053	4689.020	1520.100		3.26	375	13357	43.73	6050
54	LN054	4689.270	1520.740		8.55	304	4061	15.37	1172
55	LN055	4689.520	1520.470		6.19	131	4048	14.81	725
56	LN056	4689.470	1520.020		7.86	439	9422	29.42	3924
57	LN057	4688.530	1520.700		3.17	619	9690	46.17	6144
58	LN058	4689.970	1519.930		13.57	36	593	17.13	179
59	LN059	4690.320	1520.220		13.42	42	2878	17.67	653
60	LN060	4690.540	1520.360		13.38	26	1557	14.05	268
61	LN061	4690.500	1519.970		13.14	42	1572	17.97	671
62	LN062	4690.770	1520.230		11.30	106	4046	24.19	1515
63	LN063	4691.000	1520.900		4.50	287	4868	20.42	4040
64	LN064	4690.980	1520.430		3.04	247	3677	13.61	3347
65	LN065	4691.450	1520.520		3.56	555	8630	19.20	3228
66	LN066	4691.430	1520.120		7.97	127	8292	33.91	2455
67	LN067	4685.530	1519.580		13.64	29	153	13.24	26
68	LN068	4685.930	1519.520		16.16	28	730	15.56	176
69	LN069	4686.540	1519.550		12.80	49	3051	16.65	555
70	LN070	4687.030	1519.530		15.91	28	673	13.70	173
71	LN071	4687.550	1519.620		9.40	225	7548	43.45	3299
72	LN072	4687.990	1519.580		4.86	399	8172	40.31	6072
73	LN073	4688.450	1519.650		12.83	100	3414	21.25	1221
74	LN074	4688.690	1519.700		14.37	106	6020	25.79	2130
75	LN075	4689.000	1519.550		6.11	230	8712	44.48	4304
76	LN076	4689.320	1519.650		6.46	477	7308	29.73	4347
77	LN077	4689.530	1519.420		7.70	33	1053	7.13	278
78	LN078	4689.740	1519.750		4.80	446	7316	42.13	3881
79	LN079	4689.980	1519.500		6.02	348	5268	25.60	3281
80	LN080	4690.250	1519.730		6.45	542	5137	25.28	2719
81	LN081	4690.450	1519.500		8.47	181	8994	39.72	2797
82	LN082	4690.770	1519.770		9.84	36	916	9.72	358
83	LN083	4691.020	1519.900		7.50	165	6785	34.61	2235
84	LN084	4690.980	1519.550		8.26	263	7956	38.07	3271
85	LN085	4691.550	1519.450		7.55	691	7169	33.65	3709

List of Geochemical Analysis ( 1)

Ser. No.	Sample No.	X-coord	Y-coord	Location (km)	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
1	LN201	4685.450	1521.540		9.27	15	184	8.09	45
2	LN202	4685.450	1521.040		9.95	22	180	9.66	37
3	LN203	4685.950	1521.550		12.22	30	132	11.60	61
4	LN204	4686.000	1521.000		13.38	23	387	13.80	73
5	LN205	4686.700	1521.280		10.81	37	357	9.97	296
6	LN206	4687.530	1519.100		10.31	95	3307	20.46	2115
7	LN207	4687.330	1519.320		4.82	468	9107	41.15	4885
8	LN208	4687.800	1519.350		4.20	438	10466	40.62	6390
9	LN209	4687.780	1519.750		18.72	20	983	10.55	424
10	LN210	4688.220	1519.780		12.53	149	3395	24.87	2888
11	LN211	4688.030	1521.550		4.44	6	64	3.07	14
12	LN212	4688.010	1521.000		14.76	31	374	12.08	264
13	LN213	4688.300	1521.300		13.74	33	200	12.29	72
14	LN214	4688.400	1521.860		3.96	465	9963	39.25	6038
15	LN215	4688.530	1521.650		2.42	584	9885	35.16	8980
16	LN216	4688.720	1521.350		2.93	525	8077	36.74	8596
17	LN217	4688.600	1520.930		1.97	313	5499	26.76	5120
18	LN218	4688.850	1521.890		1.07	270	2247	16.40	4100
19	LN219	4688.980	1521.560		2.61	666	4929	32.55	11859
20	LN220	4688.970	1520.990		2.61	515	6066	35.73	7955
21	LN221	4689.230	1521.860		1.29	478	3704	23.13	7531
22	LN222	4689.470	1521.500		9.93	145	1429	9.19	985
23	LN223	4689.280	1521.200		3.40	546	7483	33.04	6994
24	LN224	4689.480	1520.980		10.40	28	2279	17.42	1155
25	LN225	4691.880	1520.950		11.43	28	767	8.33	300
26	LN226	4691.890	1520.520		8.60	383	8973	31.40	2442
27	LN227	4691.730	1519.950		4.54	4519	4519	22.82	3664
28	LN228	4690.750	1519.320		7.61	261	8956	39.85	3548
29	LN229	4690.240	1519.270		5.88	382	6054	24.83	3542
30	LN230	4689.210	1519.250		6.68	305	3235	14.57	3352
31	LN231	4691.500	1520.800		13.11	665	135	13.55	260
32	LN232	4685.260	1520.230		9.45	19	176	8.80	42
33	LN233	4685.490	1520.540		9.05	379	4450	19.70	1328
34	LN234	4685.530	1520.050		14.41	15	106	15.19	61
35	LN235	4685.720	1520.740		13.62	15	191	12.55	59
36	LN236	4686.020	1520.300		9.84	22	200	5.80	32
37	LN237	4686.020	1520.530		13.95	35	128	10.90	88
38	LN238	4685.980	1520.000		14.10	33	166	11.82	56
39	LN239	4689.000	1521.230		3.13	733	8427	36.56	9083
40	LN240	4686.550	1520.000		12.45	27	743	11.51	238
41	LN241	4689.250	1521.500		1.62	589	6150	29.87	14497
42	LN242	4687.000	1520.070		11.67	44	1088	11.25	394
43	LN243	4688.710	1521.600		3.26	600	11876	43.29	6660
44	LN244	4687.550	1520.000		13.43	38	114	10.88	63
45	LN245	4688.010	1520.530		10.07	22	40	6.37	30
46	LN246	4688.000	1520.000		18.27	16	832	7.36	278
47	LN247	4688.240	1520.770		2.14	520	6770	27.16	8501
48	LN248	4688.300	1520.250		15.38	142	2353	18.23	1822
49	LN249	4688.530	1520.450		2.11	433	5068	30.64	11253
50	LN250	4688.480	1519.990		7.99	200	5038	32.03	4451

List of Geochemical Analysis ( 2 )

Ser. No.	Sample No.	X-coord	Y-coord	Location (km)	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
51	LN251	4688.800	1520.810		2.72	147	8324	37.05	8398
52	LN252	4688.980	1520.480		11.11	27	547	12.53	97
53	LN253	4689.020	1520.100		14.22	84	2684	17.28	482
54	LN254	4689.270	1520.740		7.92	433	7926	19.11	2231
55	LN255	4689.520	1520.470		7.48	349	5605	16.41	848
56	LN256	4689.470	1520.020		9.88	373	5736	24.01	2337
57	LN257	4688.530	1520.700		1.94	804	5215	38.07	10449
58	LN258	4689.970	1519.930		14.32	138	178	15.64	98
59	LN259	4690.320	1520.220		15.08	41	2784	19.52	683
60	LN260	4690.540	1520.360		13.52	24	1452	12.60	274
61	LN261	4690.500	1519.970		13.67	49	1680	19.98	814
62	LN262	4690.770	1520.230		12.57	181	4205	27.16	1813
63	LN263	4691.000	1520.900		4.37	353	5614	18.93	5298
64	LN264	4690.980	1520.430		3.07	260	3861	14.47	3779
65	LN265	4691.450	1520.520		5.01	594	10119	32.28	4595
66	LN266	4691.430	1520.120		7.68	144	7959	35.02	2572
67	LN267	4685.530	1519.580		13.91	31	165	13.60	29
68	LN268	4685.930	1519.520		15.82	35	870	16.45	228
69	LN269	4686.540	1519.550		13.05	52	2842	18.33	602
70	LN270	4687.030	1519.530		15.17	33	318	13.21	99
71	LN271	4687.550	1519.620		7.50	252	9213	35.31	3439
72	LN272	4687.990	1519.560		4.62	561	10466	40.46	9305
73	LN273	4688.450	1519.650		10.30	120	6052	23.14	1788
74	LN274	4688.690	1519.700		13.79	97	6257	26.04	2178
75	LN275	4689.000	1519.550		5.15	271	9664	40.34	4810
76	LN276	4689.320	1519.650		6.88	632	8097	36.28	4982
77	LN277	4689.530	1519.420		8.19	46	1363	9.52	395
78	LN278	4689.740	1519.750		3.15	987	6420	38.02	6945
79	LN279	4689.980	1519.500		4.99	426	6798	23.96	5048
80	LN280	4690.250	1519.730		5.96	606	6800	27.37	3426
81	LN281	4690.450	1519.500		7.31	222	10396	38.09	3333
82	LN282	4690.770	1519.770		9.08	29	413	6.39	207
83	LN283	4691.020	1519.900		6.48	667	9052	36.67	3827
84	LN284	4690.980	1519.550		7.28	389	8472	38.16	3859
85	LN285	4691.550	1519.450		5.61	499	7521	27.15	5400

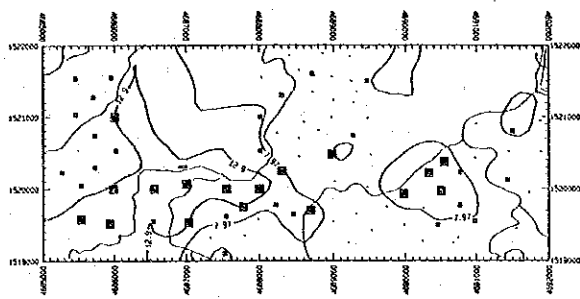
Appendix 15

Distribution map of elements in Area N

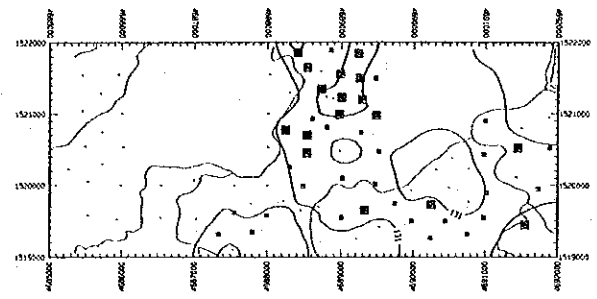




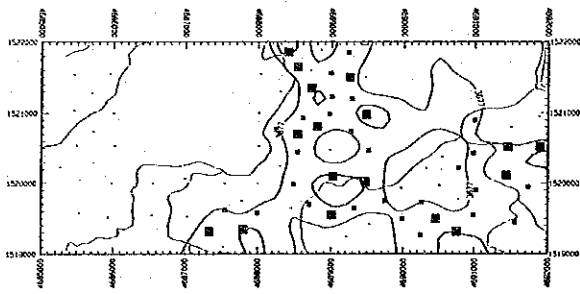
Soil 50cm



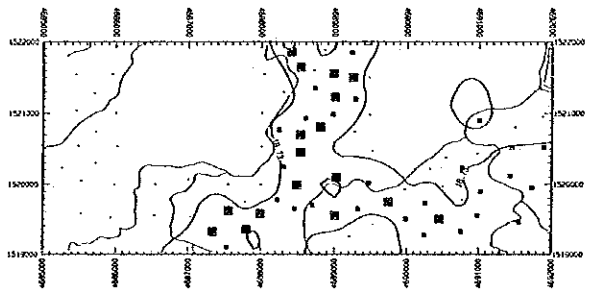
Al



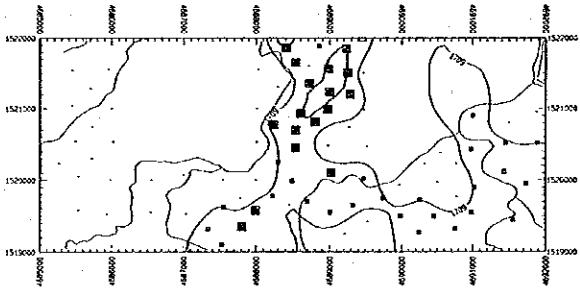
Co



Cr

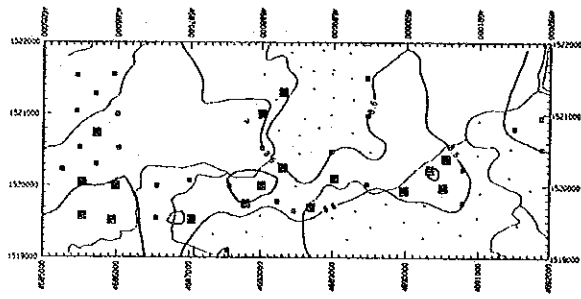


Fe



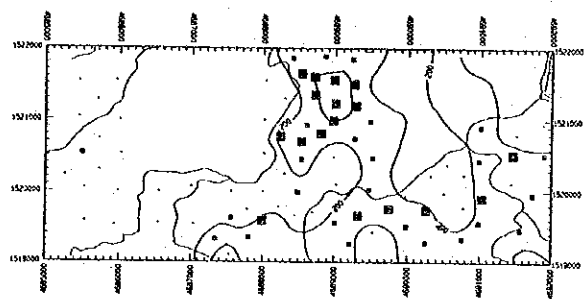
Ni

Soil 150cm



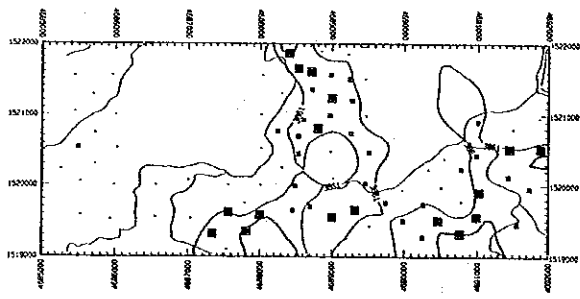
Al

13.520  
8.600



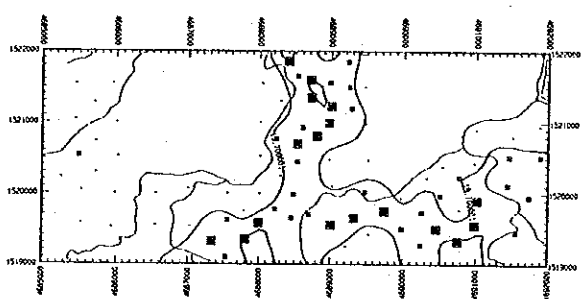
Co

515.000  
200.000



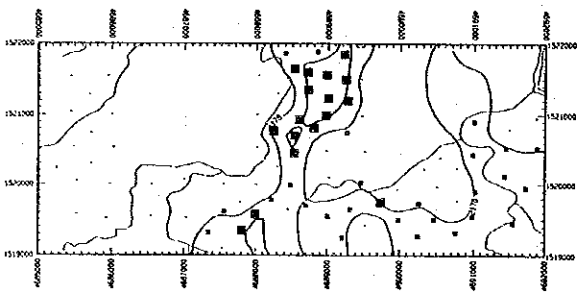
Cr

8097.000  
3861.000



Fe

35.730  
19.700



Ni

5120.000  
2178.000

Appendix 16

List of stream sediment geochemical samples in Area P



Ser. No.	Sample No.	Coordinates		Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow *1	Size *2	Color
		N	E								
1	LP501	1516.91	4686.36	S. Wasai	gabbro	Gb	2	5.0	3	1	B.
2	LP502	1516.63	4686.43	S. Wasai	gabbro	Gb	2	5.0	4	1	B.
3	LP503	1516.42	4686.52	S. Wasai	————	Gb	2	5.0	4	1	B.
4	LP504	1516.38	4686.76	S. Wasai	————	Gb	2	4.0	4	1	B.
5	LP505	1516.33	4687.28	S. Wasai	————	Gb	1	3.5	4	1	B.
6	LP506	1516.14	4687.40	S. Wasai	————	Gb	1	3.0	4	1	B.
7	LP507	1515.92	4687.49	S. Wasai	————	Gb	1	1.5	4	1	B.
8	LP508	1516.25	4686.72	S. Wasai	dolerite	Gb	1	1.5	4	1	B.
9	LP509	1516.43	4687.35	S. Wasai	————	Gb	1	3.5	3	1	B.
10	LP510	1516.53	4687.59	S. Wasai	————	Gb	1	2.0	4	1	B.
11	LP511	1514.93	4686.06	S. Walitanah	dolerite	Gb	2	5.0	3	1	B.
12	LP512	1515.21	4686.44	S. Walitanah	dolerite	Gb	2	3.5	4	1	B.
13	LP513	1515.48	4686.73	S. Walitanah	gabbro	Gb	1	1.5	4	1	B.
14	LP514	1515.09	4686.46	S. Walitanah	dolerite	Gb	1	1.0	2	1	B.
15	LP515	1515.34	4686.76	S. Walitanah	gabbro	Gb	1	2.5	4	1	B.
16	LP516	1514.35	4686.20	S. Walitanah	dolerite	Gb	1	3.0	3	1	B.
17	LP517	1514.58	4686.39	S. Walitanah	————	Gb	1	2.0	4	1	B.
18	LP518	1514.62	4686.69	S. Walitanah	————	Gb	1	1.0	4	1	B.
19	LP519	1514.23	4686.20	S. Walitanah	dolerite	Gb	1	3.0	4	1	B.
20	LP520	1514.08	4686.43	S. Walitanah	dolerite	Gb	1	3.0	4	1	B.
21	LP521	1513.93	4686.64	S. Walitanah	————	Gb	1	1.5	4	1	B.
22	LP522	1513.82	4686.07	S. Walitanah	basalt	Gb	1	3.5	3	1	B.
23	LP523	1513.56	4686.22	S. Walitanah	————	Gb	1	2.5	4	1	B.
24	LP524	1513.37	4686.42	S. Walitanah	peridotite	Pr	1	2.0	4	1	B.
25	LP525	1513.00	4686.09	S. Walitanah	————	Pr	1	2.5	3	1	B.
26	LP526	1512.77	4686.34	S. Walitanah	peridotite	Pr	1	1.0	4	1	B.
27	LP527	1516.70	4690.90	S. Mailo	peridotite	Pr	4	15.0	2	3	B.
28	LP528	1516.45	4690.82	S. Mailo	peridotite	Pr	4	20.0	4	1	R.B.
29	LP529	1516.09	4690.61	S. Mailo	peridotite	Pr	3	8.0	3	3	R.B.
30	LP530	1515.89	4690.39	S. Mailo	peridotite	Pr	3	10.0	3	2	R.B.
31	LP531	1515.65	4690.25	S. Mailo	peridotite	Pr	3	7.0	3	3	R.B.
32	LP532	1515.36	4689.95	S. Mailo	peridotite	Pr	3	10.0	4	3	R.B.
33	LP533	1515.22	4689.49	S. Mailo	peridotite	Pr	3	1.0	4	4	B.
34	LP534	1515.19	4689.31	S. Mailo	peridotite	Pr	3	1.0	3	4	B.
35	LP535	1514.98	4689.06	S. Mailo	peridotite	Pr	3	3.5	4	3	D.B.
36	LP536	1514.89	4688.89	S. Mailo	peridotite	Pr	2	4.0	4	1	D.B.
37	LP537	1514.74	4688.72	S. Mailo	peridotite	Pr	2	2.5	4	1	D.B.
38	LP538	1514.27	4688.28	S. Mailo	peridotite	Pr	2	2.5	4	1	D.B.
39	LP539	1514.04	4687.96	S. Mailo	————	Pr	2	5.0	4	1	B.
40	LP540	1513.45	4687.56	S. Mailo	————	Pr	2	4.0	4	1	B.
41	LP541	1513.16	4687.60	S. Mailo	————	Pr	2	4.0	4	2	B.
42	LP542	1512.96	4687.65	S. Mailo	————	Pr	2	4.0	4	2	B.
43	LP543	1512.60	4687.78	S. Mailo	————	Pr	2	3.0	4	2	B.
44	LP544	1512.40	4687.92	S. Mailo	————	Pr	2	2.0	4	2	B.
45	LP545	1512.26	4688.08	S. Mailo	————	Pr	1	1.5	4	1	B.
46	LP546	1511.84	4688.10	S. Mailo	————	Pr	1	3.0	4	1	B.
47	LP547	1516.12	4690.12	S. Mailo	peridotite	Pr	2	3.5	4	3	R.B.
48	LP548	1516.28	4690.02	S. Mailo	peridotite	Pr	2	2.5	4	1	B.
49	LP549	1516.78	4689.44	S. Mailo	peridotite	Pr	2	3.5	4	2	B.
50	LP550	1516.46	4689.70	S. Mailo	peridotite	Pr	1	3.5	4	4	R.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		Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow *1	Size *2	Color
		N	E								
51	LP551	1516.35	4689.93	S. Mailo	peridotite	Pr	1	2.0	4	4	R.B.
52	LP552	1516.92	4689.15	S. Mailo	peridotite	Pr	1	2.0	4	2	R.B.
53	LP553	1516.35	4689.78	S. Mailo	peridotite	Pr	1	1.5	4	3	R.B.
54	LP554	1516.40	4689.25	S. Mailo	peridotite	Pr	1	3.0	3	4	R.B.
55	LP555	1515.41	4689.72	S. Mailo	peridotite	Pr	1	1.0	3	4	B.
56	LP556	1515.22	4690.18	S. Mailo	peridotite	Pr	2	3.5	4	3	R.B.
57	LP557	1514.80	4690.27	S. Mailo	peridotite	Pr	2	4.0	4	1	D.B.
58	LP558	1514.56	4690.26	S. Mailo	peridotite	Pr	2	5.0	4	2	B.
59	LP559	1514.13	4690.14	S. Mailo	peridotite	Pr	2	3.5	4	2	B.
50	LP560	1513.93	4690.06	S. Mailo	peridotite	Pr	1	2.5	4	1	B.
61	LP561	1513.70	4689.88	S. Mailo	peridotite	Pr	1	4.0	4	2	B.
62	LP562	1514.64	4690.38	S. Mailo	peridotite	Pr	1	1.5	4	1	B.
63	LP563	1514.19	4690.06	S. Mailo	peridotite	Pr	1	1.0	4	3	B.
64	LP564	1513.99	4690.16	S. Mailo	peridotite	Pr	1	2.0	4	3	B.
65	LP565	1515.81	4690.27	S. Mailo	peridotite	Pr	1	1.5	4	4	R.B.
66	LP566	1515.32	4689.04	S. Mailo	peridotite	Pr	1	2.0	3	3	D.B.
67	LP567	1515.49	4688.87	S. Mailo	peridotite	Pr	1	1.5	4	3	D.B.
68	LP568	1515.72	4688.69	S. Mailo	peridotite	Pr	1	2.0	4	3	D.B.
69	LP569	1515.97	4688.58	S. Mailo	peridotite	Pr	1	2.0	4	3	D.B.
70	LP570	1515.26	4688.97	S. Mailo	peridotite	Pr	1	1.0	3	3	D.B.
71	LP571	1515.31	4688.69	S. Mailo	peridotite	Pr	1	1.0	3	3	D.B.
72	LP572	1515.42	4688.47	S. Mailo	peridotite	Pr	1	1.0	3	3	D.B.
73	LP573	1514.62	4689.13	S. Mailo	peridotite	Pr	2	3.0	4	1	D.B.
74	LP574	1514.31	4689.11	S. Mailo	peridotite	Pr	2	3.0	4	1	D.B.
75	LP575	1514.03	4689.07	S. Mailo	serpentinite	Pr	2	5.0	4	1	D.B.
76	LP576	1513.77	4688.95	S. Mailo	peridotite	Pr	2	3.5	4	1	D.B.
77	LP577	1513.51	4688.97	S. Mailo	peridotite	Pr	2	3.0	4	1	D.B.
78	LP578	1513.23	4689.11	S. Mailo	peridotite	Pr	1	1.0	4	1	D.B.
79	LP579	1513.17	4688.96	S. Mailo	peridotite	Pr	1	2.0	4	1	D.B.
80	LP580	1514.67	4688.42	S. Mailo	peridotite	Pr	1	1.5	4	3	D.B.
81	LP581	1514.71	4688.15	S. Mailo	serpentinite	Pr	1	2.0	3	3	D.B.
82	LP582	1514.78	4687.89	S. Mailo	serpentinite	Pr	1	1.0	3	3	D.B.
83	LP583	1514.51	4688.16	S. Mailo	peridotite	Pr	1	2.5	4	3	D.B.
84	LP584	1514.57	4687.84	S. Mailo	peridotite	Pr	1	2.0	3	3	D.B.
85	LP585	1514.52	4687.55	S. Mailo	peridotite	Pr	1	1.5	3	3	D.B.
86	LP586	1514.03	4688.10	S. Mailo	————	Pr	1	1.0	4	2	B.
87	LP587	1513.92	4687.45	S. Mailo	————	Pr	1	3.0	4	3	B.
88	LP588	1516.35	4690.67	S. Mailo	peridotite	Pr	1	0.5	4	4	B.
89	LP589	1513.50	4687.87	S. Mailo	————	Pr	1	1.0	4	1	B.
90	LP590	1513.28	4687.94	S. Mailo	————	Pr	1	1.5	4	1	B.
91	LP591	1513.10	4688.10	S. Mailo	————	Pr	1	1.5	4	1	B.
92	LP592	1513.21	4687.50	S. Mailo	————	Pr	2	3.0	4	1	B.
93	LP593	1512.96	4687.36	S. Mailo	————	Pr	2	3.0	4	1	B.
94	LP594	1512.76	4687.17	S. Mailo	————	Pr	2	3.0	4	2	B.
95	LP595	1512.48	4686.93	S. Mailo	————	Pr	1	2.5	4	1	B.
96	LP596	1513.17	4687.36	S. Mailo	————	Pr	1	1.0	4	1	B.
97	LP597	1512.66	4687.66	S. Mailo	————	Pr	1	4.0	4	2	B.
98	LP598	1512.37	4687.56	S. Mailo	————	Pr	1	4.0	4	2	B.
99	LP599	1512.14	4687.35	S. Mailo	————	Pr	2	3.0	4	2	B.
100	LP600	1512.16	4687.92	S. Mailo	————	Pr	1	2.0	4	1	B.

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

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

Ser. No.	Sample No.	Coordinates		Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow *1	Size *2	Color
		N	E								
101	LP601	1511.92	4687.81	S. Mailo	————	Pr	1	1.5	4	1	B.
102	LP602	1511.86	4687.89	S. Mailo	————	Pr	1	2.0	4	1	B.
103	LP603	1512.08	4688.08	S. Mailo	————	Pr	1	1.5	4	1	B.
104	LP604	1512.07	4688.43	S. Mailo	————	Pr	1	1.5	4	1	B.
105	LP605	1511.89	4688.18	S. Mailo	————	Pr	1	1.5	4	1	B.

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

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





Appendix 17

Analytical results of stream sediment  
geochemical samples in Area P



List of Geochemical Analysis ( I )

Ser. No.	Sample No.	X-coord	Y-coord	Location (km)	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
1	LP501	4686.360	1516.910	5.94	226	23932	11.12	1998	
2	LP502	4686.430	1516.630	12.69	131	11112	9.01	1112	
3	LP503	4686.520	1516.420	4.86	228	20837	11.55	2210	
4	LP504	4686.760	1516.380	4.73	209	36606	10.46	1826	
5	LP505	4687.280	1516.330	5.14	235	19485	10.84	2225	
6	LP506	4687.400	1516.140	5.46	275	18515	12.15	2604	
7	LP507	4687.490	1515.920	4.66	261	14212	11.80	2583	
8	LP508	4686.720	1516.250	15.02	66	3358	7.19	310	
9	LP509	4687.350	1516.430	3.45	266	12523	13.52	3556	
10	LP510	4687.590	1516.530	3.19	186	13255	10.77	2570	
11	LP511	4686.060	1514.930	8.78	191	23164	12.20	1363	
12	LP512	4686.440	1515.210	6.61	447	24258	19.29	3511	
13	LP513	4686.730	1515.480	7.85	146	20579	9.89	1632	
14	LP514	4686.460	1515.090	7.82	64	6818	8.10	232	
15	LP515	4686.760	1515.340	4.93	573	34238	24.05	3692	
16	LP516	4686.200	1514.350	6.25	133	41278	10.57	1181	
17	LP517	4686.390	1514.580	7.28	137	19814	10.91	1463	
18	LP518	4686.690	1514.620	10.12	76	1765	11.92	54	
19	LP519	4686.200	1514.230	12.51	120	23565	11.26	946	
20	LP520	4686.430	1513.930	6.60	147	39927	11.01	1637	
21	LP521	4686.640	1513.930	5.17	146	35576	10.75	2076	
22	LP522	4686.070	1513.820	3.08	174	14914	12.73	2973	
23	LP523	4686.220	1513.560	1.67	192	25810	12.13	2537	
24	LP524	4686.420	1513.370	1.46	214	24149	12.15	3016	
25	LP525	4686.090	1513.000	2.74	98	5212	8.10	1657	
26	LP526	4686.340	1512.770	3.01	115	10364	8.86	2073	
27	LP527	4690.900	1516.700	3.16	200	34013	9.99	2042	
28	LP528	4690.820	1516.450	3.47	167	51679	9.05	1548	
29	LP529	4690.610	1516.090	5.18	200	32148	10.53	1807	
30	LP530	4690.390	1515.890	8.59	196	65549	9.79	1356	
31	LP531	4690.250	1515.650	5.58	201	28958	11.04	2133	
32	LP532	4689.950	1515.360	5.54	229	32805	11.73	2036	
33	LP533	4689.490	1515.220	4.64	506	41466	24.67	3816	
34	LP534	4689.310	1515.190	3.74	466	32154	26.28	5731	
35	LP535	4689.060	1514.980	6.36	316	22363	14.31	1892	
36	LP536	4688.890	1514.890	1.38	224	16531	11.83	2757	
37	LP537	4688.720	1514.740	1.24	205	17135	11.20	2617	
38	LP538	4688.280	1514.270	1.20	192	20667	10.28	2513	
39	LP539	4687.960	1514.040	1.75	271	24474	14.56	2744	
40	LP540	4687.560	1513.450	1.30	251	14663	12.97	3434	
41	LP541	4687.600	1513.160	1.43	204	26806	10.51	2413	
42	LP542	4687.650	1512.960	1.87	224	42291	10.82	2211	
43	LP543	4687.780	1512.600	1.48	174	29678	10.24	2515	
44	LP544	4687.920	1512.400	1.63	207	30784	11.41	2832	
45	LP545	4688.080	1512.260	3.49	254	73525	12.06	2057	
46	LP546	4688.100	1511.840	1.19	197	17934	10.09	2614	
47	LP547	4690.120	1516.120	7.32	345	35307	19.44	3024	
48	LP548	4690.020	1516.280	6.27	223	39450	11.73	2045	
49	LP549	4689.440	1516.780	6.15	202	36839	11.47	1747	
50	LP550	4689.700	1516.460	7.16	399	33869	19.04	2259	

List of Geochemical Analysis ( 2)

Ser. No.	Sample No.	X-coord	Y-coord	Location (km)	Al %	Co ppm	Cr ppm	Fe %	Ni ppm
51	LP551	4683.930	1516.350		7.52	328	35064	15.23	1979
52	LP552	4689.150	1516.920		9.20	317	39843	16.12	2677
53	LP553	4689.780	1516.350		8.92	253	57769	12.81	2277
54	LP554	4689.250	1516.400		9.95	306	61980	14.55	3037
55	LP555	4689.720	1515.410		5.03	851	47909	34.86	4577
56	LP556	4690.180	1515.220		1.96	154	15855	8.66	2379
57	LP557	4690.270	1514.800		3.44	192	36483	10.09	2294
58	LP558	4690.260	1514.560		4.58	199	50319	10.66	1987
59	LP559	4690.140	1514.130		2.96	187	17551	10.62	2910
60	LP560	4690.060	1513.930		3.48	173	25734	9.68	2049
61	LP561	4689.880	1513.700		1.78	187	31745	10.94	2216
62	LP562	4690.380	1514.640		1.30	188	17955	10.41	2441
63	LP563	4690.060	1514.190		1.64	209	27021	11.72	2510
64	LP564	4690.160	1513.990		2.10	208	43867	11.72	2494
65	LP565	4690.270	1515.810		1.74	232	28092	12.08	2878
66	LP566	4689.040	1515.320		2.17	195	51062	10.60	2056
67	LP567	4688.870	1515.490		4.63	226	44476	12.55	2414
68	LP568	4688.690	1515.720		7.98	225	39373	11.65	1943
69	LP569	4688.580	1515.970		6.61	449	44130	18.83	4878
70	LP570	4688.970	1515.260		5.39	320	21063	19.55	4428
71	LP571	4688.690	1515.310		8.42	412	61735	20.66	2670
72	LP572	4688.470	1515.420		6.04	251	19026	13.32	2283
73	LP573	4689.130	1514.620		7.16	217	33152	12.94	1644
74	LP574	4689.110	1514.310		6.80	208	23794	12.91	1759
75	LP575	4689.070	1514.030		7.89	181	37911	10.89	1644
76	LP576	4688.950	1513.770		5.86	343	15116	13.94	3108
77	LP577	4688.970	1513.510		5.48	400	11160	16.89	3981
78	LP578	4689.110	1513.230		5.05	437	9825	16.18	3857
79	LP579	4688.960	1513.170		3.56	246	33525	12.46	2301
80	LP580	4688.420	1514.670		3.55	259	35768	12.36	2443
81	LP581	4688.150	1514.710		4.83	223	52779	12.18	1858
82	LP582	4687.890	1514.780		4.02	316	28744	17.40	3618
83	LP583	4688.160	1514.510		4.94	377	40950	14.89	2858
84	LP584	4687.840	1514.570		4.19	337	23592	14.42	3105
85	LP585	4687.550	1514.520		2.83	333	21589	14.96	4349
86	LP586	4688.100	1514.030		10.45	343	45398	17.69	2238
87	LP587	4687.450	1513.920		9.02	357	31286	18.67	2550
88	LP588	4690.670	1516.350		8.46	415	20954	21.76	3343
89	LP589	4687.870	1513.500		7.46	258	40951	13.80	1741
90	LP590	4687.940	1513.280		7.51	269	26316	13.76	1741
91	LP591	4688.100	1513.100		9.73	242	47541	12.31	1486
92	LP592	4687.500	1513.210		7.01	247	68432	13.89	1757
93	LP593	4687.360	1512.960		4.12	416	81013	22.99	4136
94	LP594	4687.170	1512.760		9.69	217	27453	12.85	2325
95	LP595	4686.930	1512.480		5.22	394	65826	21.62	4185
96	LP596	4687.360	1513.170		5.28	368	86844	19.94	3475
97	LP597	4687.660	1512.660		5.14	453	72420	24.28	4994
98	LP598	4687.560	1512.370		2.59	330	41398	18.56	3014
99	LP599	4687.350	1512.140		2.32	261	43342	16.31	2553
100	LP600	4687.920	1512.160		1.90	260	37803	17.40	2199

List of Geochemical Analysis ( 3 )

Ser. No.	Sample No.	Location (km)		Al %	Co ppm	Cr ppm	Fe %	Ni ppm
		X-coord	Y-coord					
101	LP601	4687.810	1511.920	3.61	238	92413	15.22	1585
102	LP602	4687.890	1511.860	5.26	378	107352	20.20	2373
103	LP603	4688.080	1512.080	2.76	254	56741	13.69	2501
104	LP604	4688.430	1512.070	2.02	249	36169	13.51	2465
105	LP605	4688.180	1511.890	1.44	230	20994	12.63	3081



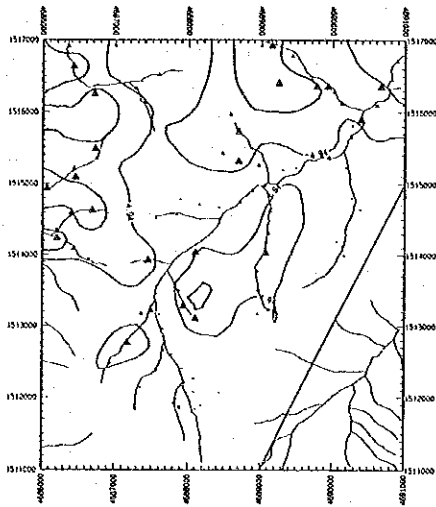
Appendix 18

Distribution map of elements in Area P



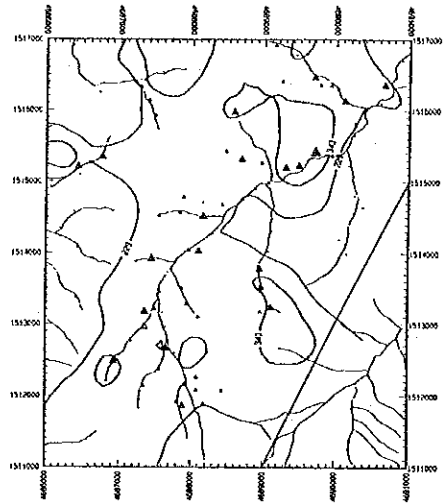


Stream Sediments



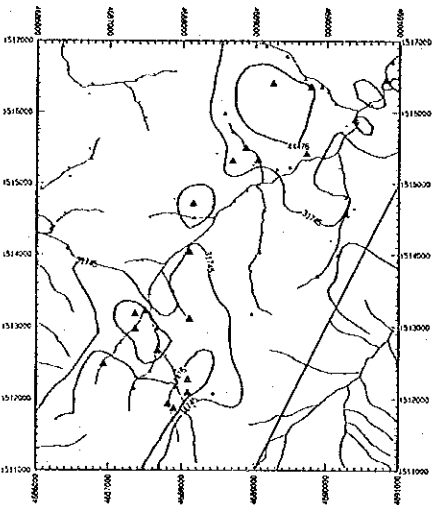
**Al**

▲ 7.510  
● 4.560



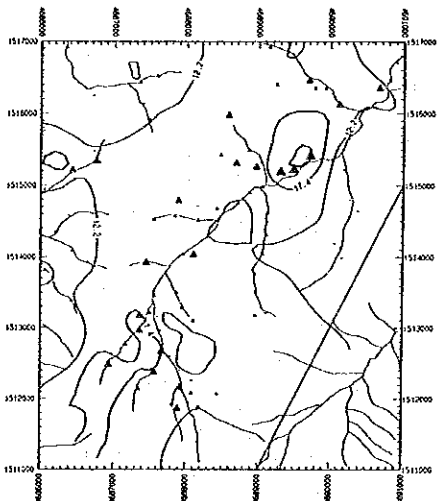
**Co**

▲ 567.000  
● 343.000  
● 229.000



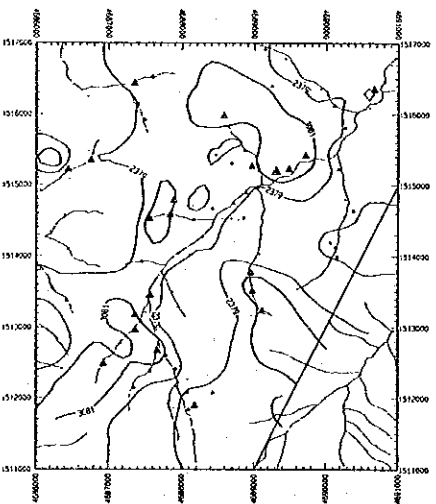
**Cr**

▲ 44475.000  
● 31745.000



**Fe**

▲ 24.320  
● 17.400  
● 12.200



**Ni**

▲ 5.959.000  
● 3081.000  
● 2379.000



Appendix 19

List of soil geochemical samples in Area 0



## Area: Middle Stream of S. Karamuak (Area Q)

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegetation
		N	E										
1	LQ001	1505.50	4682.82	S. Karamuak	peridotite	Pr	30	B.	R	S	S	D	primary forest
2	LQ002	1505.29	4683.10	S. Karamuak	peridotite	Pr	35	D.B.	F	S	S	D	primary forest
3	LQ003	1505.17	4783.69	S. Karamuak	peridotite	Pr	30	D.B.	R	C	S	W	primary forest
4	LQ004	1504.80	4682.48	S. Karamuak	peridotite	Pr	30	D.B.	R	C	M	W	primary forest
5	LQ005	1504.16	4682.38	S. Karamuak	peridotite	Pr	40	D.B.	R	C	F	W	secondary forest
6	LQ006	1504.52	4682.96	S. Karamuak	—————	Pr	30	D.B.	R	C	M	W	primary forest
7	LQ007	1504.45	4683.57	S. Karamuak	—————	Pr	35	D.B.	R	C	M	W	primary forest
8	LQ008	1504.38	4683.98	S. Karamuak	—————	Pr	30	D.B.	R	C	S	W	primary forest
9	LQ009	1504.57	4684.60	S. Karamuak	—————	Pr	35	D.B.	R	C	M	W	primary forest
10	LQ010	1504.03	4684.33	S. Karamuak	—————	Pr	30	D.B.	R	C	F	W	secondary forest
11	LQ011	1504.04	4684.73	S. Karamuak	—————	Pr	30	D.B.	R	C	F	W	secondary forest
12	LQ012	1504.41	4685.59	S. Karamuak	—————	Pr	30	D.B.	M	C	F	W	secondary forest
13	LQ013	1504.05	4685.47	S. Karamuak	—————	Pr	20	D.B.	R	C	F	W	secondary forest
14	LQ014	1503.90	4682.88	S. Karamuak	peridotite	Pr	40	D.B.	R	C	F	W	secondary forest
15	LQ015	1503.58	4683.35	S. Karamuak	peridotite	Pr	40	D.B.	R	C	S	W	secondary forest
16	LQ016	1503.32	4683.69	S. Karamuak	—————	Pr	40	D.B.	R	C	F	W	secondary forest
17	LQ017	1503.72	4683.96	S. Karamuak	—————	Pr	25	D.B.	R	C	F	W	secondary forest
18	LQ018	1503.28	4684.17	S. Karamuak	peridotite	Pr	30	B.	F	C	S	W	secondary forest
19	LQ019	1503.42	4684.60	S. Karamuak	peridotite	Pr	30	D.B.	R	C	S	W	secondary forest
20	LQ020	1503.78	4685.14	S. Karamuak	—————	Pr	40	D.B.	R	C	F	W	secondary forest
21	LQ021	1503.33	4685.73	S. Karamuak	—————	Pr	30	D.B.	F	C	F	W	primary forest
22	LQ022	1503.57	4686.37	S. Karamuak	—————	Pr	30	D.B.	R	C	F	W	primary forest
23	LQ023	1503.18	4686.36	S. Karamuak	—————	Pr	30	D.B.	R	C	M	W	primary forest
24	LQ024	1503.59	4686.95	S. Karamuak	laterite	Pr	25	D.B.	M	S	F	W	primary forest
25	LQ025	1503.38	4687.16	S. Karamuak	laterite	Pr	10	D.B.	M	S	F	W	primary forest
26	LQ026	1502.33	4682.44	S. Karamuak	—————	Pr	40	D.B.	R	C	F	W	secondary forest
27	LQ027	1502.75	4682.88	S. Karamuak	—————	Pr	40	D.B.	R	C	F	W	secondary forest
28	LQ028	1502.97	4683.20	S. Karamuak	peridotite	Pr	40	D.B.	R	C	F	W	secondary forest
29	LQ029	1502.34	4683.18	S. Karamuak	—————	Pr	40	D.B.	R	C	F	W	secondary forest
30	LQ030	1502.79	4683.65	S. Karamuak	—————	Pr	40	D.B.	R	C	F	W	secondary forest

\*1Gravel: Many (M), Few (F), Rare or none (R)

\*3Topography: Steep (S), Moderate (M), Flat (F)

\*2Grain size: Sandy (S), Clayey (C)

\*4Humidity: Dry (D), Wet (W)

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E										
31	LQ031	1502.13	4683.77	S. Karamuak	—	Pr	40	D.B.	R	C	M	W	secondary forest
32	LQ032	1502.75	4684.02	S. Karamuak	peridotite	Pr	30	B.	F	C	M	W	secondary forest
33	LQ033	1502.93	4684.39	S. Karamuak	peridotite	Pr	30	D.B.	F	C	S	W	secondary forest
34	LQ034	1502.62	4684.36	S. Karamuak	peridotite	Pr	30	D.B.	F	C	M	W	secondary forest
35	LQ035	1502.20	4684.36	S. Karamuak	—	Pr	30	D.B.	R	C	S	W	secondary forest
36	LQ036	1502.00	4684.75	S. Karamuak	—	Pr	40	D.B.	R	C	M	W	primary forest
37	LQ037	1502.88	4684.95	S. Karamuak	—	Pr	30	D.B.	R	C	S	W	primary forest
38	LQ038	1502.47	4685.12	S. Karamuak	peridotite	Pr	35	D.B.	R	C	M	W	primary forest
39	LQ039	1502.77	4685.48	S. Karamuak	—	Pr	30	D.B.	R	C	S	W	primary forest
40	LQ040	1501.95	4685.28	S. Karamuak	—	Pr	40	D.B.	R	C	F	W	primary forest
41	LQ041	1502.20	4685.95	S. Karamuak	—	Pr	30	D.B.	R	C	M	W	primary forest
42	LQ042	1502.08	4686.62	S. Karamuak	—	Pr	30	D.B.	R	C	M	W	primary forest
43	LQ043	1502.95	4687.00	S. Karamuak	—	Pr	10	D.B.	M	S	F	W	primary forest
44	LQ044	1501.95	4682.65	S. Karamuak	—	Pr	30	D.B.	R	C	F	W	secondary forest
45	LQ045	1501.63	4683.32	S. Karamuak	—	Pr	30	R.B.	R	C	M	W	secondary forest
46	LQ046	1501.40	4683.40	S. Karamuak	—	Pr	30	R.B.	R	C	M	W	secondary forest
47	LQ047	1501.34	4683.94	S. Karamuak	—	Pr	30	D.B.	R	C	M	W	secondary forest
48	LQ048	1501.73	4684.17	S. Karamuak	—	Pr	30	D.B.	R	C	S	W	secondary forest
49	LQ049	1501.73	4684.52	S. Karamuak	—	Pr	30	B.	R	C	S	W	secondary forest
50	LQ050	1501.50	4684.75	S. Karamuak	—	Pr	20	B.	R	C	M	W	secondary forest
51	LQ051	1501.11	4684.88	S. Karamuak	—	Pr	30	D.B.	R	C	F	W	secondary forest
52	LQ052	1501.66	4685.50	S. Karamuak	—	Pr	35	D.B.	R	C	F	W	secondary forest
53	LQ053	1501.54	4686.27	S. Karamuak	peridotite	Pr	30	R.B.	R	C	M	W	secondary forest
54	LQ054	1501.57	4686.94	S. Karamuak	peridotite	Pr	20	D.B.	M	S	S	W	secondary forest
55	LQ055	1501.05	4686.85	S. Karamuak	—	Pr	30	B.	R	C	M	W	secondary forest
56	LQ056	1501.38	4687.50	S. Karamuak	peridotite	Pr	30	D.B.	R	C	S	W	secondary forest
57	LQ057	1500.93	4683.50	S. Karamuak	—	Pr	20	B.	R	C	M	W	secondary forest
58	LQ058	1500.52	4683.70	S. Karamuak	—	Pr	40	D.B.	R	C	F	W	secondary forest
59	LQ059	1500.80	4684.08	S. Karamuak	—	Pr	40	D.B.	R	C	M	W	secondary forest
60	LQ060	1500.95	4684.42	S. Karamuak	—	Pr	40	D.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. Karamuak (Area Q)

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E										
61	LQ061	1500.50	4684.73	S. Karamuak	—	Pr	40	R. B.	R	C	M	W	secondary forest
62	LQ062	1500.72	4685.28	S. Karamuak	peridotite	Pr	20	D. B.	M	C	M	W	secondary forest
63	LQ063	1500.18	4685.47	S. Karamuak	—	Pr	25	R. B.	R	C	M	W	secondary forest
64	LQ064	1500.90	4685.82	S. Karamuak	peridotite	Pr	25	D. B.	M	C	M	W	secondary forest
65	LQ065	1500.63	4686.07	S. Karamuak	—	Pr	30	B.	R	C	M	W	secondary forest
66	LQ066	1500.57	4686.55	S. Karamuak	—	Pr	20	D. B.	M	S	M	W	secondary forest
67	LQ067	1499.99	4686.27	S. Karamuak	—	Pr	30	R. B.	R	C	M	W	secondary forest
68	LQ068	1500.69	4687.20	S. Karamuak	—	Pr	30	B.	R	C	M	W	secondary forest
69	LQ069	1500.23	4687.08	S. Karamuak	—	Pr	25	D. B.	R	C	S	W	secondary forest
70	LQ070	1500.87	4687.67	S. Karamuak	—	Pr	30	D. B.	F	C	M	W	secondary forest
71	LQ071	1500.12	4687.77	S. Karamuak	—	Pr	30	D. B.	R	C	S	W	secondary forest
72	LQ072	1500.40	4688.27	S. Karamuak	—	Pr	25	R. B.	R	C	S	W	secondary forest
73	LQ073	1499.54	4685.78	S. Karamuak	—	Pr	20	R. B.	R	C	F	W	secondary forest
74	LQ074	1499.23	4686.25	S. Karamuak	—	Pr	30	B.	R	C	F	W	secondary forest
75	LQ075	1499.16	4686.67	S. Karamuak	—	Pr	20	B.	R	S	F	W	secondary forest
76	LQ076	1499.32	4687.42	S. Karamuak	—	Pr	30	R. B.	R	C	F	W	secondary forest
77	LQ077	1499.34	4688.03	S. Karamuak	—	Pr	20	D. B.	F	C	M	W	secondary forest
78	LQ078	1499.82	4688.33	S. Karamuak	—	Pr	30	R. B.	R	C	S	W	secondary forest
79	LQ079	1499.16	4688.67	S. Karamuak	—	Pr	30	R. B.	R	C	S	W	secondary forest
80	LQ080	1498.77	4685.87	S. Karamuak	peridotite	Pr	30	D. B.	R	C	M	W	primary forest
						Pr	40	B.	R	C	F	W	secondary forest
81	LQ081	1498.68	4685.27	S. Karamuak	—	Pr	40	D. B.	R	C	F	W	secondary forest
82	LQ082	1498.38	4686.75	S. Karamuak	peridotite	Pr	40	B.	R	C	M	W	secondary forest
83	LQ083	1498.40	4687.42	S. Karamuak	peridotite	Pr	40	R. B.	R	C	M	W	secondary forest
84	LQ084	1498.42	4687.95	S. Karamuak	peridotite	Pr	40	D. B.	R	C	M	W	secondary forest
85	LQ085	1498.39	4688.48	S. Karamuak	—	Pr	40	D. B.	R	C	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 20

Analytical results of soil geochemical  
samples in Area 0





List of Geochemical Analysis( 2)

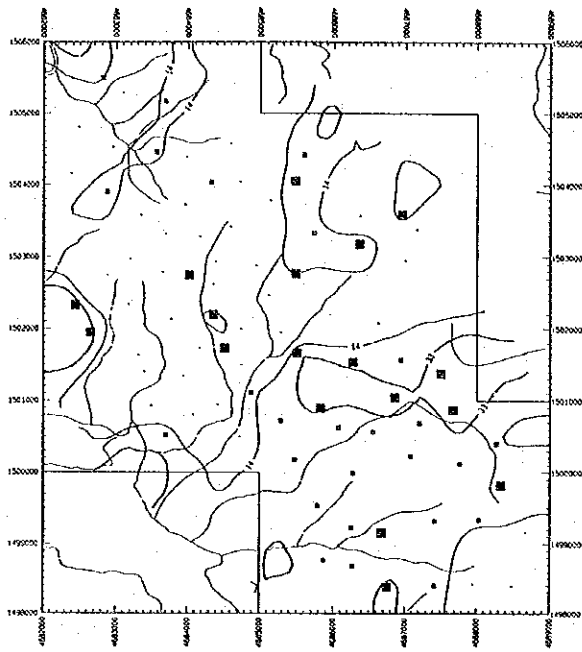
Ser. No.	Sample No.	Location (km)	X-coord	Y-coord	As	Au	Ba	Co	Cr	Cu	Hg	K	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Sr	Ti	U	W	Zn
					ppm	ppb	ppm	ppm	ppm	ppm	ppb	%	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
51	LQ051	4684.880	1501.110	18	5	8	112	6188	115	240	.05	.47	1114	>	.23	1831	>	>	.060	35.5	1	.69	.2	>	95
52	LQ052	4685.500	1501.660	56	12	9	208	6870	171	189	.04	1.10	1145	>	.06	3527	>	>	.028	79.4	1	.11	.2	>	135
53	LQ053	4686.270	1501.540	38	1	7	401	4747	75	435	.04	1.31	2291	>	.12	2899	>	>	.029	32.9	1	.28	.2	>	71
54	LQ054	4686.940	1501.570	17	>	8	175	1647	25	173	.05	14.88	1870	>	.10	2202	>	>	.023	>	3	.11	.2	>	83
55	LQ055	4686.850	1501.050	56	>	19	588	6612	37	299	.07	3.88	4062	>	.16	3725	>	>	.020	56.3	2	.23	.2	>	113
56	LQ056	4687.500	1501.390	45	1	22	455	4555	83	2152	.07	2.26	4279	>	.18	3469	>	>	.028	39.0	2	.34	.2	>	108
57	LQ057	4683.500	1500.930	8	6	45	436	6837	138	271	.07	.08	2653	>	.17	4027	>	>	.055	63.7	3	.08	.2	>	191
58	LQ058	4683.700	1500.520	29	18	13	355	2658	588	353	.05	.09	2658	>	.23	3967	>	>	.036	61.6	3	.08	.2	>	133
59	LQ059	4684.080	1500.800	>	34	34	802	6802	1109	247	.09	.28	5848	>	.23	3967	>	>	.022	14.4	46	2.81	.2	>	199
60	LQ060	4684.420	1500.950	9	130	27	122	427	49	205	.13	1.10	4868	>	1.91	134	>	>	.022	86.3	2	.14	.2	>	25
61	LQ061	4684.730	1500.500	9	18	43	702	6819	448	390	.06	.21	4846	>	.16	2577	>	>	.030	86.3	2	.14	.2	>	199
62	LQ062	4685.280	1500.720	26	>	13	458	5396	25	5556	.05	9.70	5066	>	.16	2577	>	>	.026	86.3	2	.14	.2	>	199
63	LQ063	4685.470	1500.180	27	2	9	348	6631	76	317	.05	9.70	5066	>	.16	2577	>	>	.030	86.3	2	.14	.2	>	199
64	LQ064	4685.820	1500.900	40	1	9	372	3813	43	199	.05	2.95	2263	>	.21	2554	>	>	.058	48.5	1	.37	.2	>	90
65	LQ065	4686.070	1500.630	22	>	9	298	4812	40	277	.05	6.97	3244	>	.07	3267	>	>	.020	28.8	2	.14	.2	>	77
66	LQ066	4686.550	1500.570	25	1	17	787	6130	47	221	.07	7.55	7217	>	.06	1989	>	>	.027	28.8	2	.14	.2	>	58
67	LQ067	4686.270	1499.990	31	1	12	527	5691	222	236	.04	1.40	5118	>	.29	2981	>	>	.029	39.3	5	.27	.2	>	114
68	LQ068	4687.200	1500.690	18	2	17	575	7219	63	317	.06	1.51	3360	>	.16	2976	>	>	.048	45.6	2	.32	.2	>	104
69	LQ069	4687.080	1500.230	17	1	10	592	7292	51	336	.04	1.85	4671	>	.15	2374	>	>	.019	65.5	2	.28	.2	>	134
70	LQ070	4687.670	1500.870	44	1	36	673	7171	64	749	.06	1.89	4897	>	.05	4170	>	>	.029	50.0	2	.25	.2	>	155
71	LQ071	4687.770	1500.120	31	1	17	643	6883	39	223	.05	2.46	5954	>	.15	4170	>	>	.034	57.6	3	.29	.2	>	124
72	LQ072	4688.270	1500.400	14	1	15	106	7160	55	182	.06	.43	531	>	.09	4240	>	>	.022	51.7	2	.19	.2	>	136
73	LQ073	4688.780	1499.540	30	1	25	626	7139	97	220	.06	4.00	6316	>	.16	2500	>	>	.032	56.7	1	.33	.2	>	99
74	LQ074	4686.250	1499.230	16	3	14	200	7295	119	226	.06	.56	1183	>	.12	2886	>	>	.023	63.4	3	.29	.2	>	172
75	LQ075	4686.670	1499.160	37	2	16	488	7199	170	272	.05	1.79	4745	>	.08	3393	>	>	.045	101.4	3	.45	.6	>	194
76	LQ076	4687.420	1499.320	17	1	14	511	6509	280	312	.05	.82	4778	>	.08	3393	>	>	.031	96.2	4	.32	.6	>	241
77	LQ077	4688.080	1499.340	14	1	19	455	6455	37	235	.04	1.22	8114	>	.03	2116	>	>	.036	49.0	2	.30	.8	>	161
78	LQ078	4688.330	1499.820	33	1	8	535	6674	68	186	.04	2.26	3177	>	.03	2116	>	>	.020	41.4	3	.19	.4	>	122
79	LQ079	4688.670	1499.160	12	1	6	243	5121	34	172	.04	5.16	2270	>	.20	1748	>	>	.025	56.8	1	.31	.2	>	119
80	LQ080	4685.870	1498.770	30	3	25	453	6672	127	234	.08	.76	3105	>	.16	3075	>	>	.061	35.9	4	.17	.4	>	87
81	LQ081	4686.270	1498.680	15	1	18	553	7252	74	247	.05	1.76	4013	>	.09	2282	>	>	.026	50.6	3	.37	.4	>	133
82	LQ082	4686.750	1498.380	36	1	25	902	7198	47	229	.04	2.48	9703	>	.03	3625	>	>	.029	68.4	2	.31	.2	>	156
83	LQ083	4687.420	1498.400	18	2	10	230	6003	98	236	.05	.96	1299	>	.07	2098	>	>	.022	83.5	3	.20	.2	>	217
84	LQ084	4687.950	1498.420	10	1	16	107	7307	96	190	.07	.85	496	>	.20	1654	>	>	.024	45.6	1	.30	.2	>	109
85	LQ085	4688.480	1498.390	13	4	23	574	7094	103	207	.07	2.40	5297	>	.25	4316	>	>	.017	75.7	2	.42	.2	>	132

Appendix 21

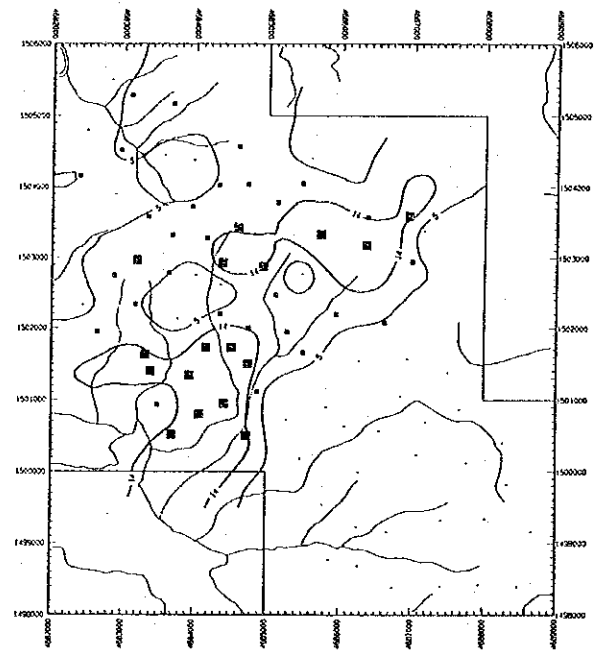
Distribution map of elements in Area Q



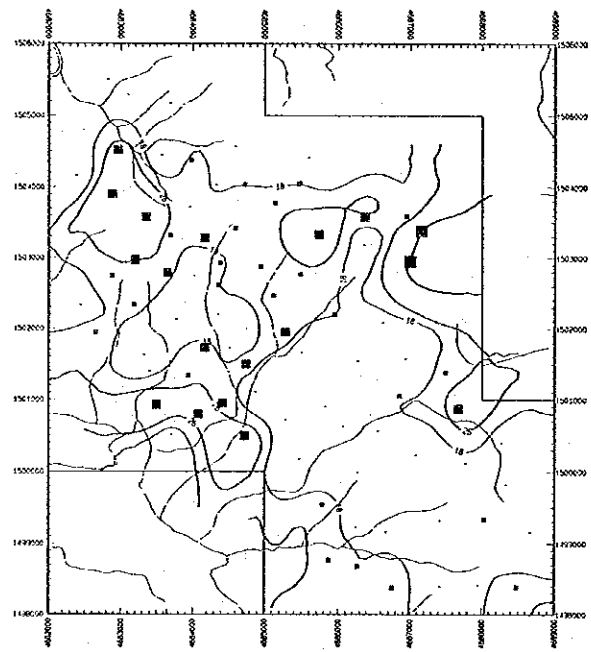
Soil



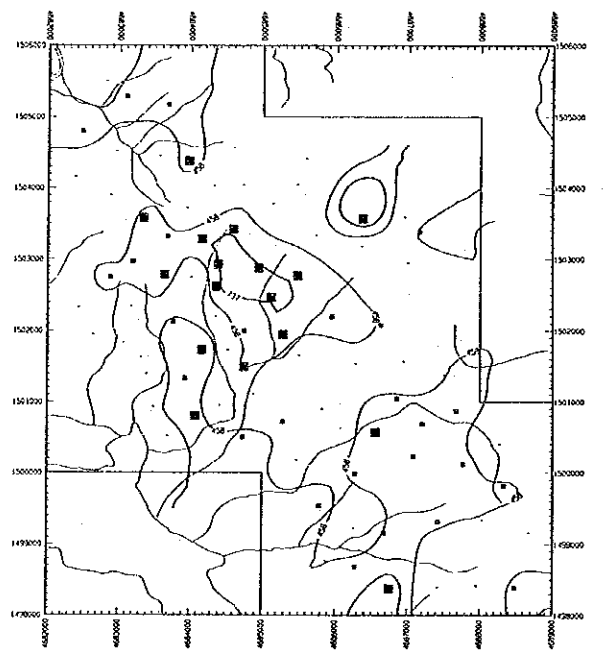
As ■ 33,000  
■ 14,000



Au ■ 14,000  
■ 5,000



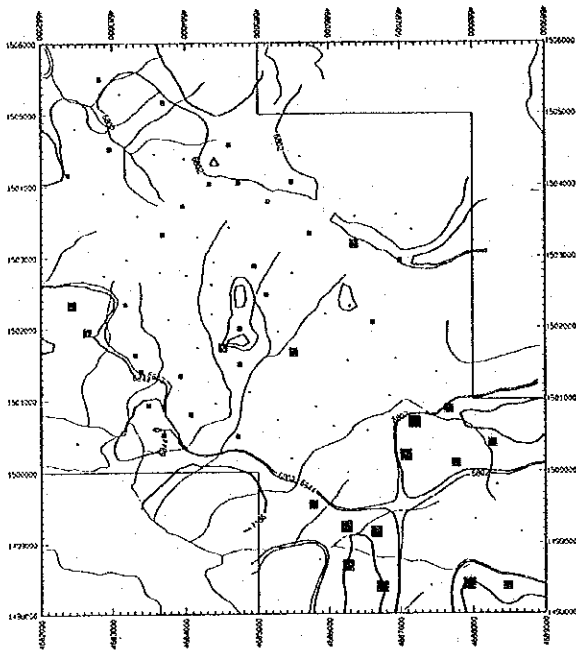
Ba ■ 75,000  
■ 26,000  
■ 10,000



Co ■ 737,000  
■ 458,000

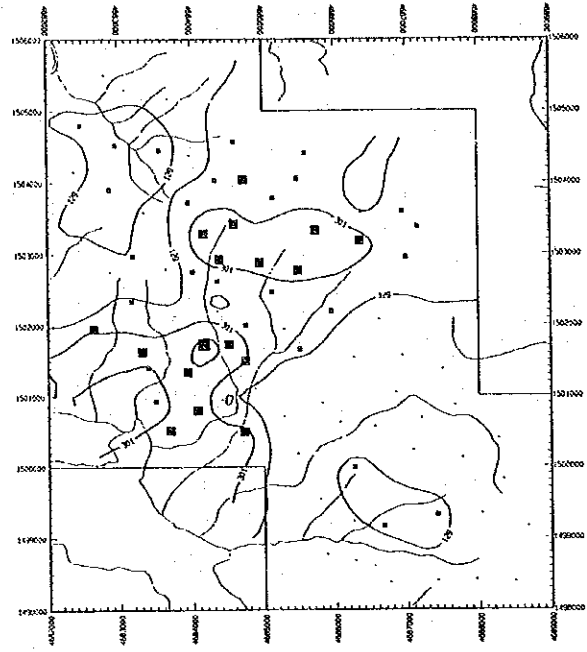


Soil



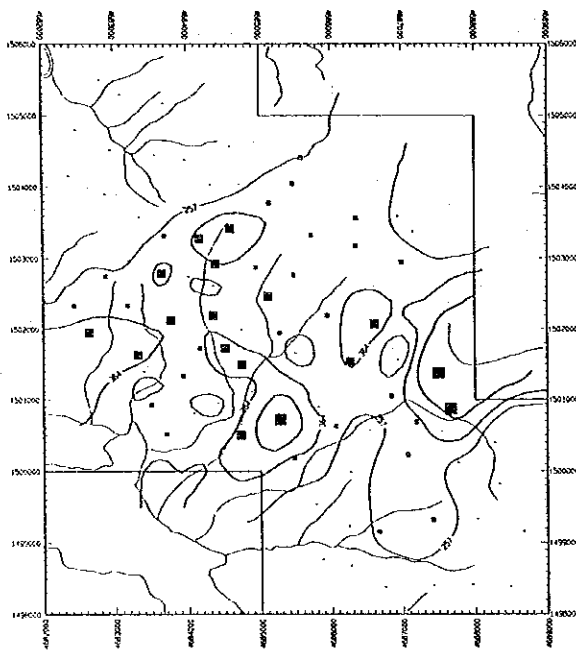
**Cr**

■	7185.000
■	6844.000
■	6602.000



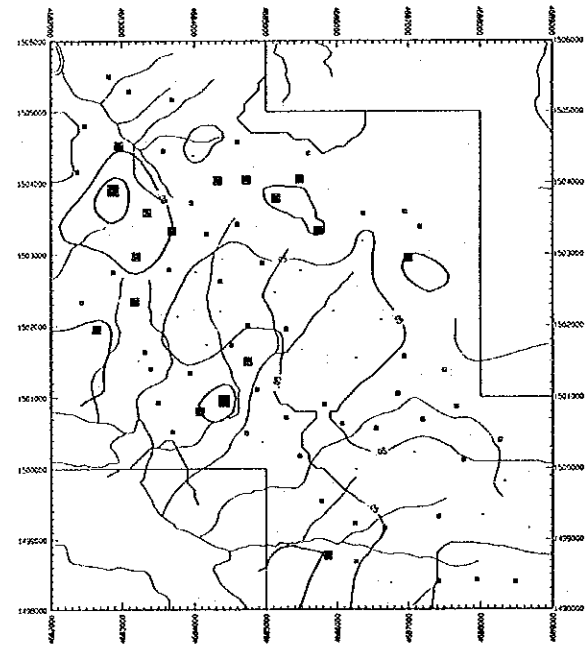
**Cu**

■	1182.000
■	301.000
■	129.000



**Hg**

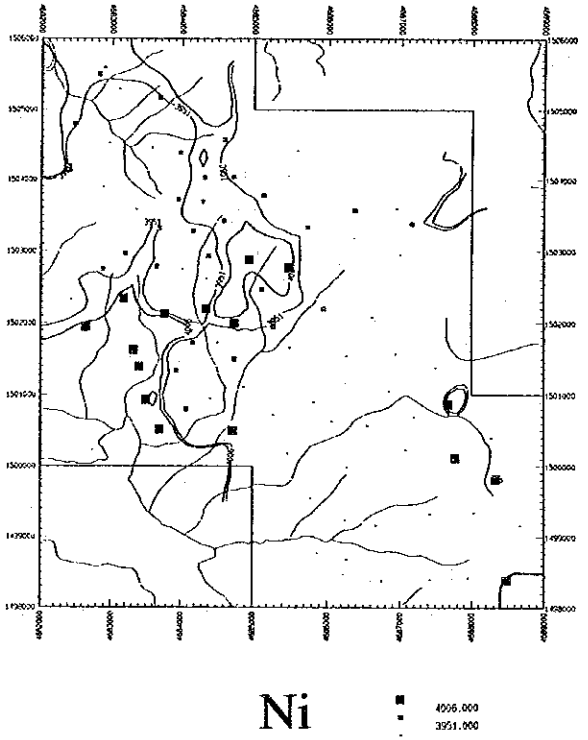
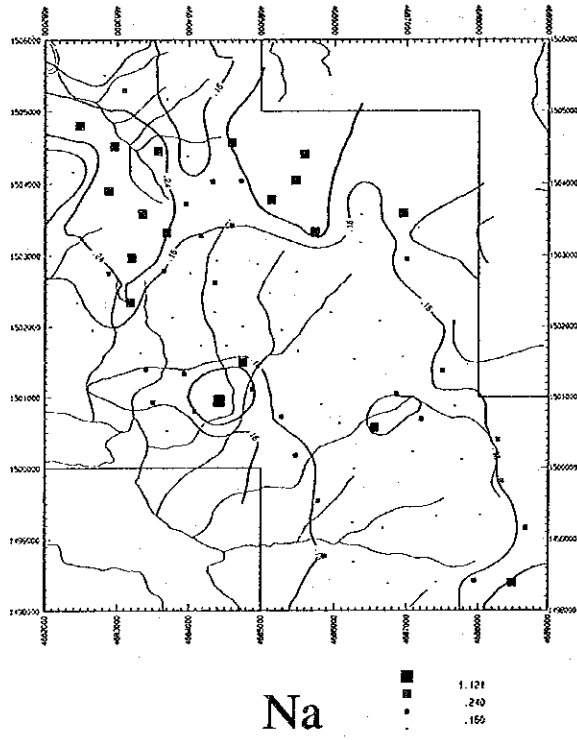
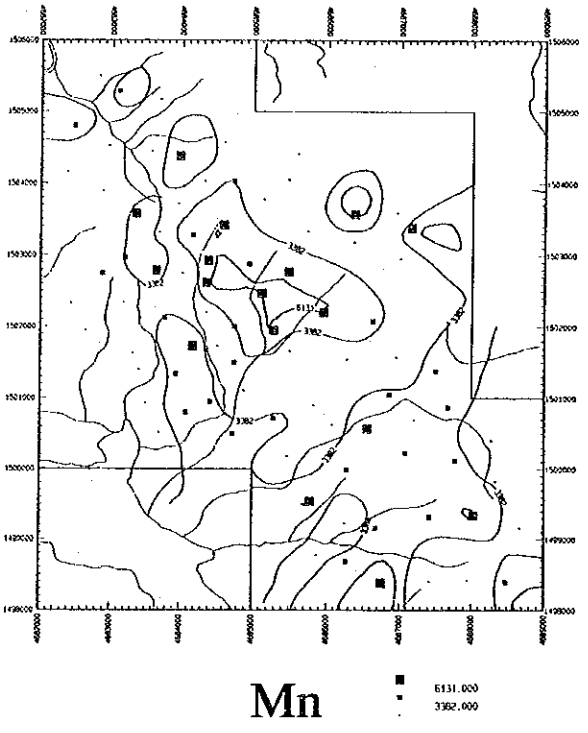
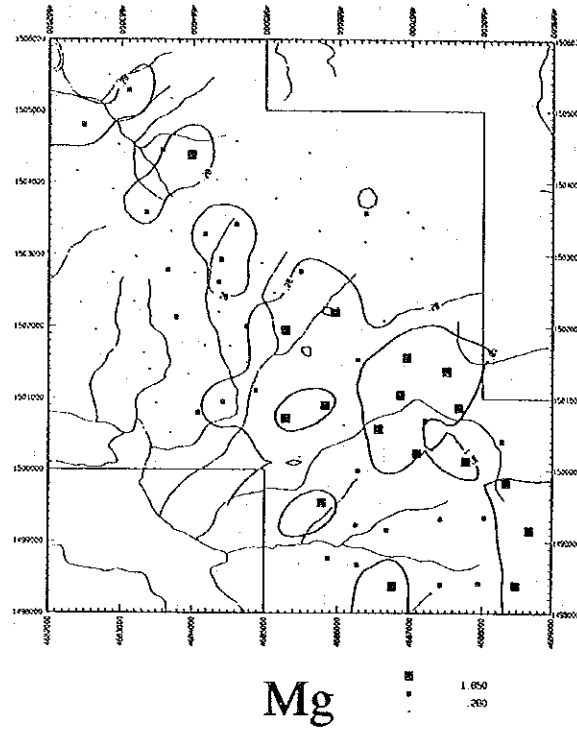
■	630.000
■	364.000
■	257.000



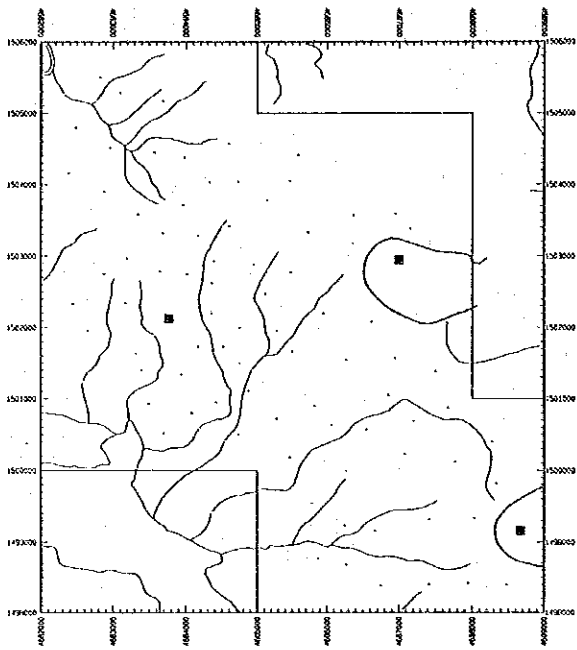
**K**

■	115
■	090
■	050

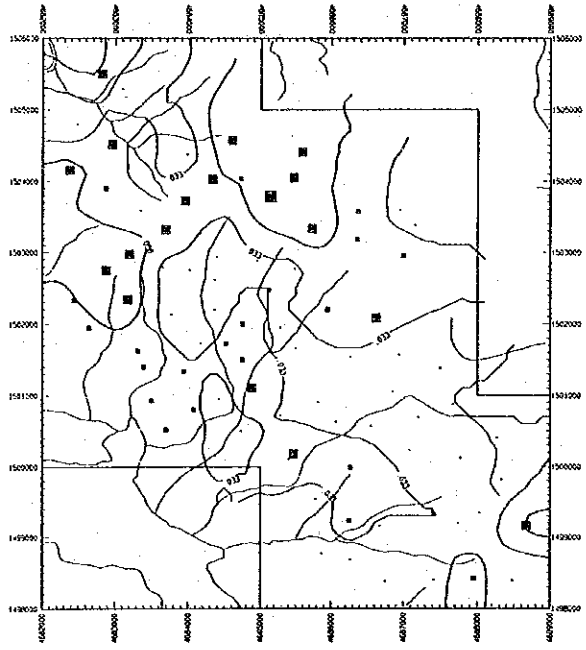
Soil



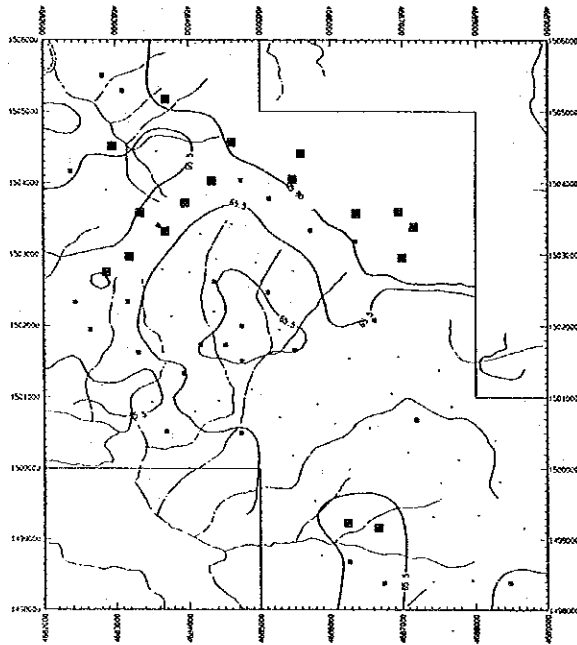
Soil



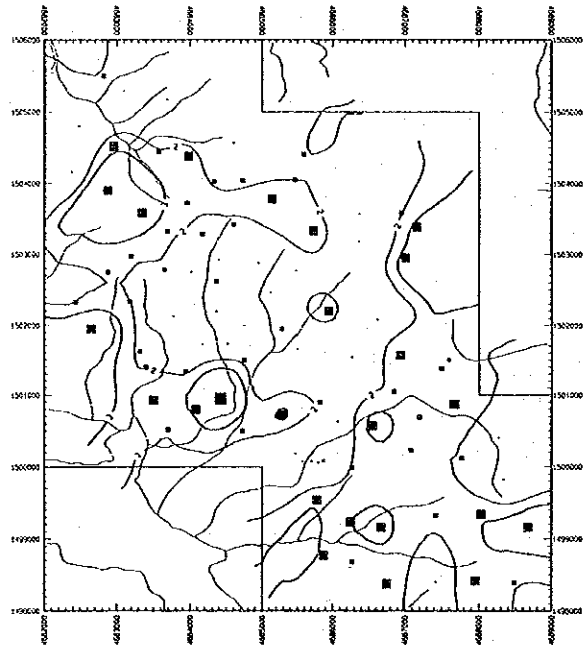
**Pb** ■ 1.623



**S** ■ .134  
■ .058  
■ .033

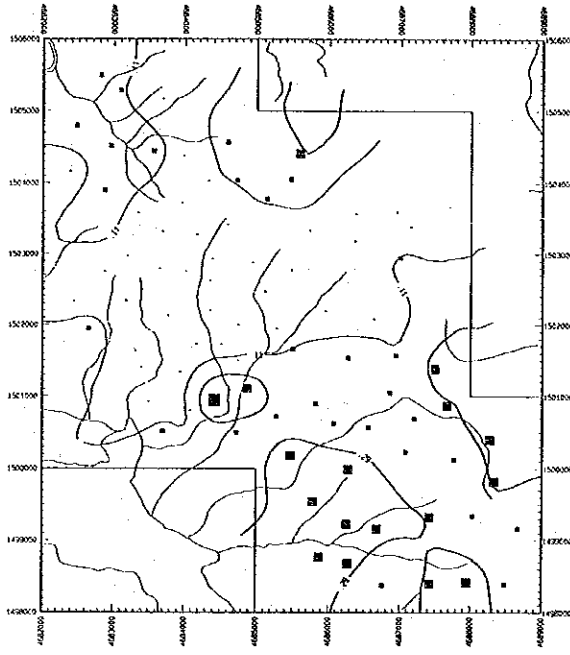


**Sb** ■ 95.800  
■ 63.500

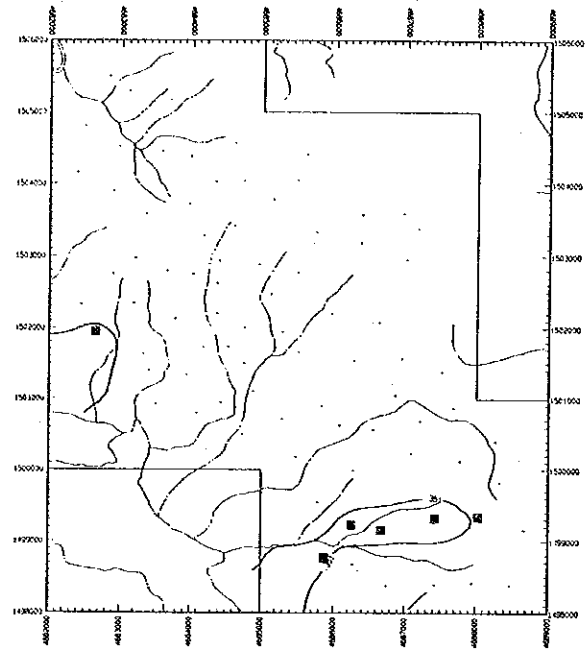


**Sr** ■ 16,000  
■ 8,000  
■ 2,000

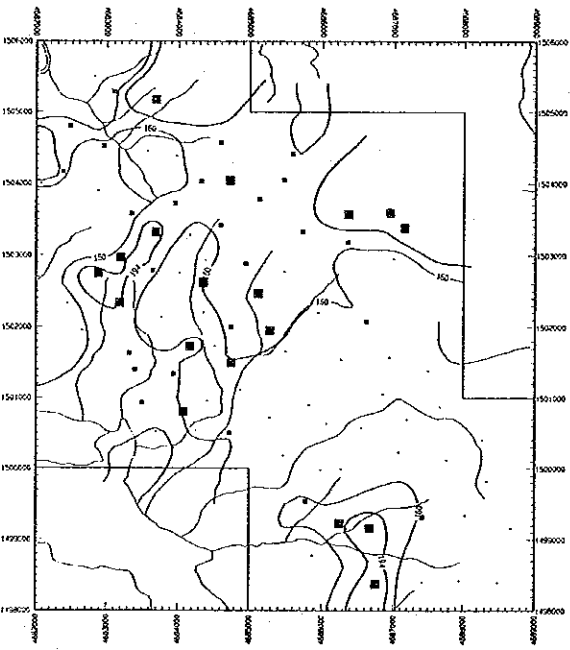
Soil



**Ti** ■ 1920  
■ 290  
■ 110



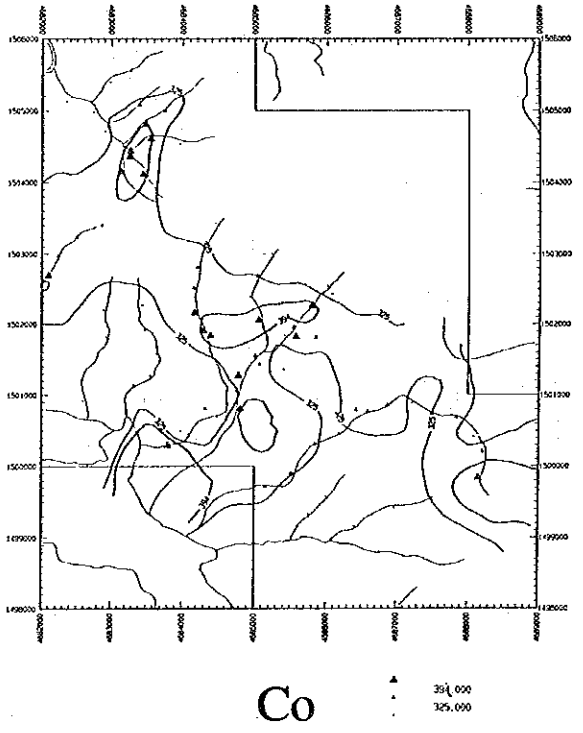
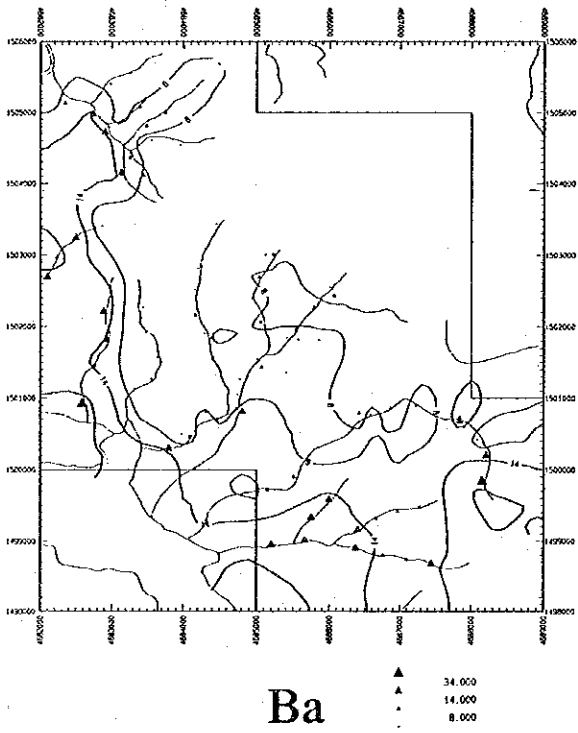
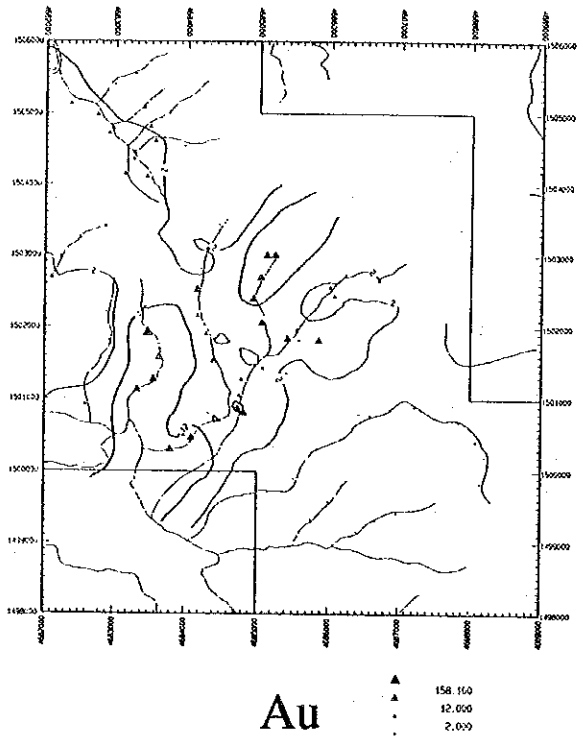
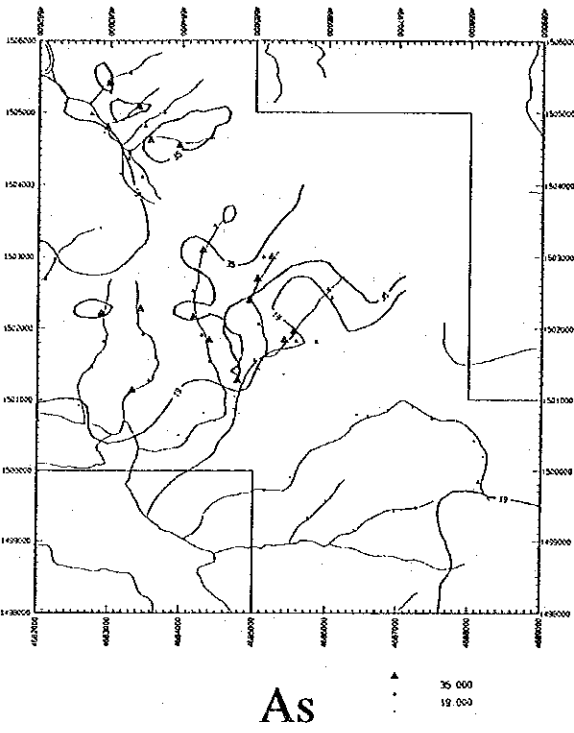
**U** ■ 351  
■ 110



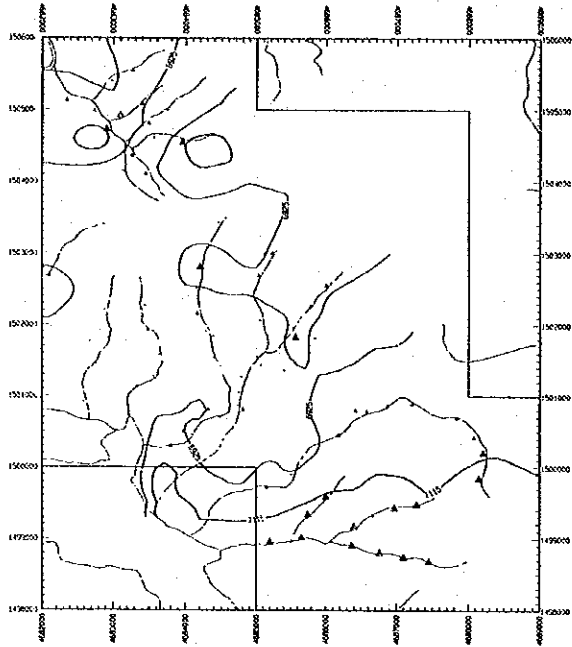
**Zn** ■ 194,000  
■ 159,000



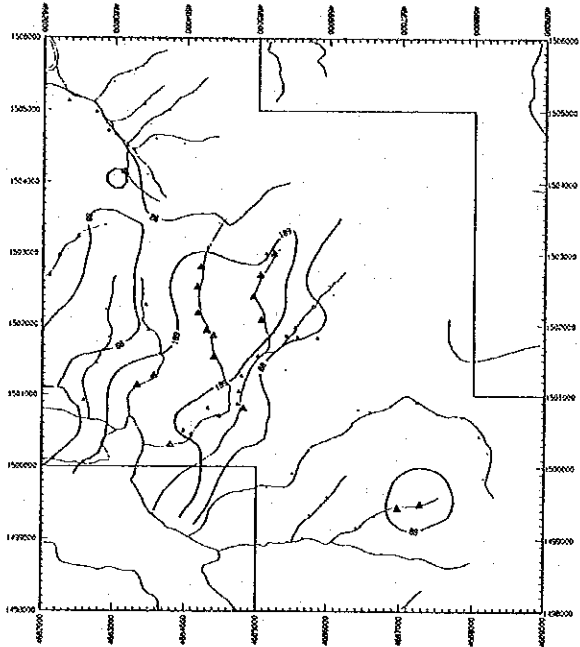
Stream Sediments



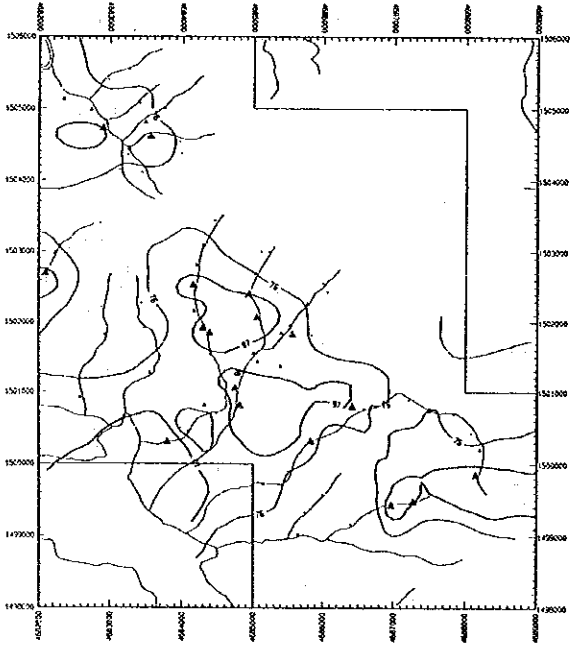
Stream Sediments



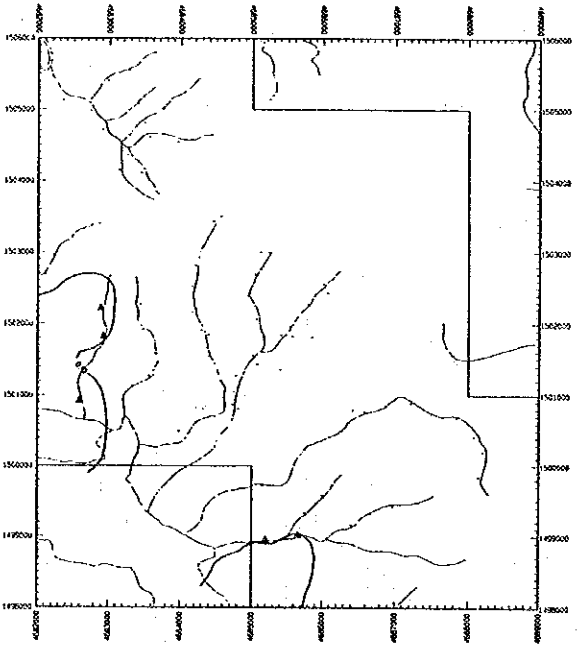
Cr ▲ 7115.000  
● 6325.000



Cu ▲ 189.000  
● 88.800

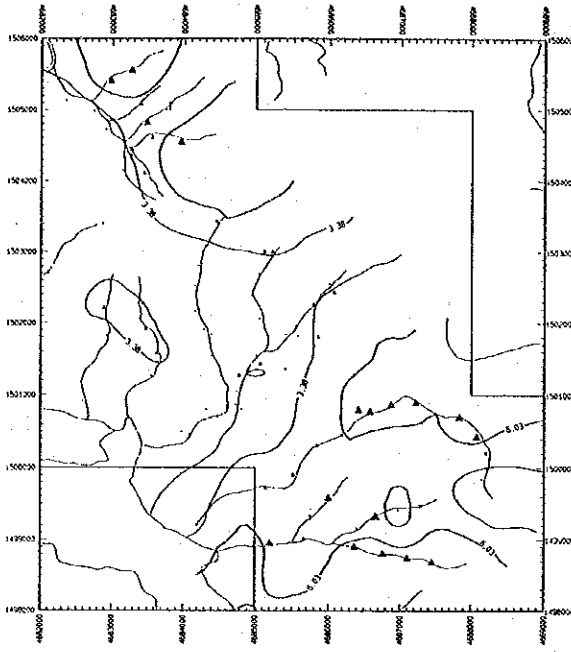


Hg ▲ 97.000  
● 76.000



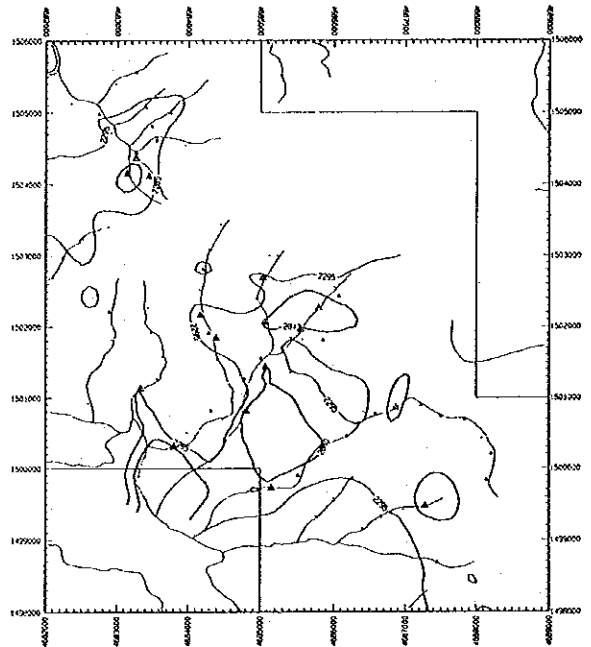
K ▲ .079

Stream Sediments



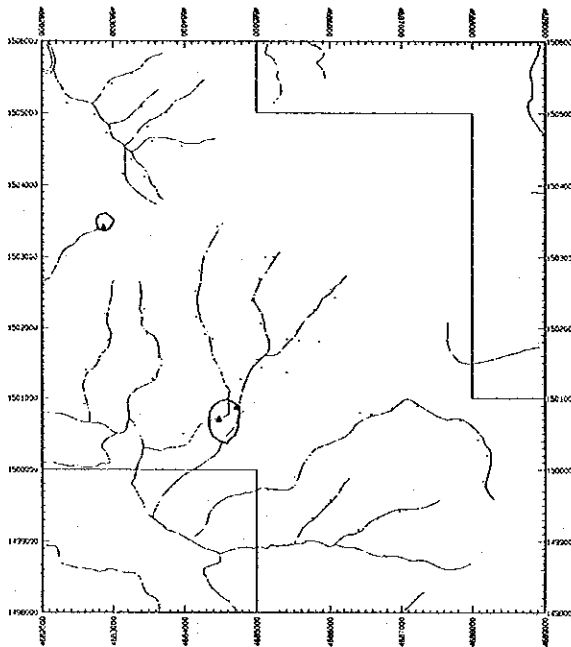
Mg

▲ 6.030  
● 3.380



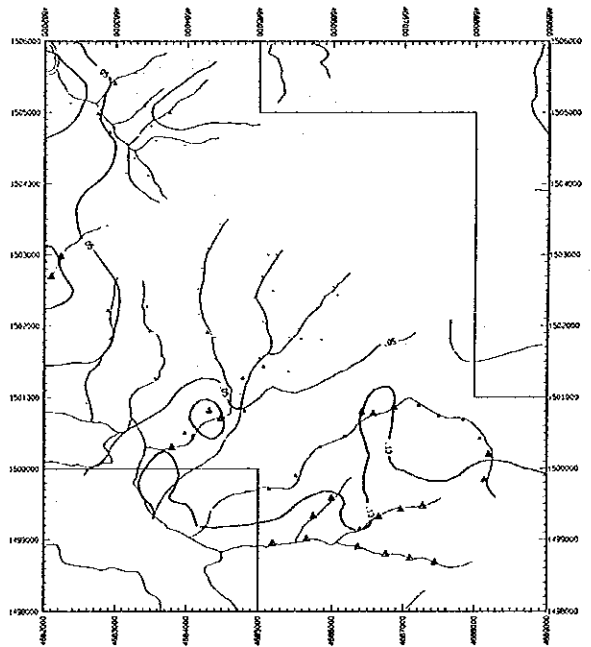
Mn

▲ 2043.000  
● 2295.000



Mo

▲ .870

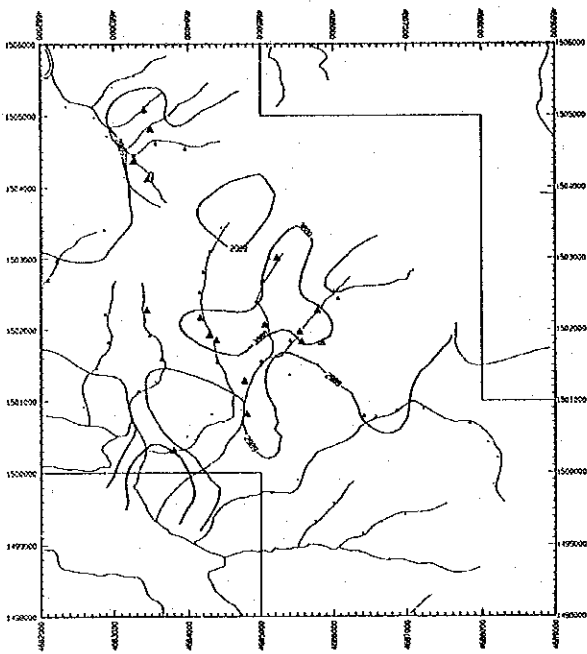


Na

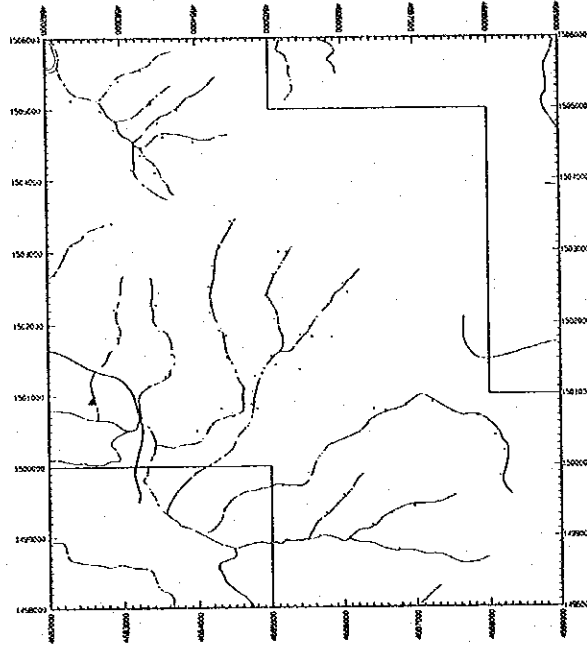
▲ .130  
● .050



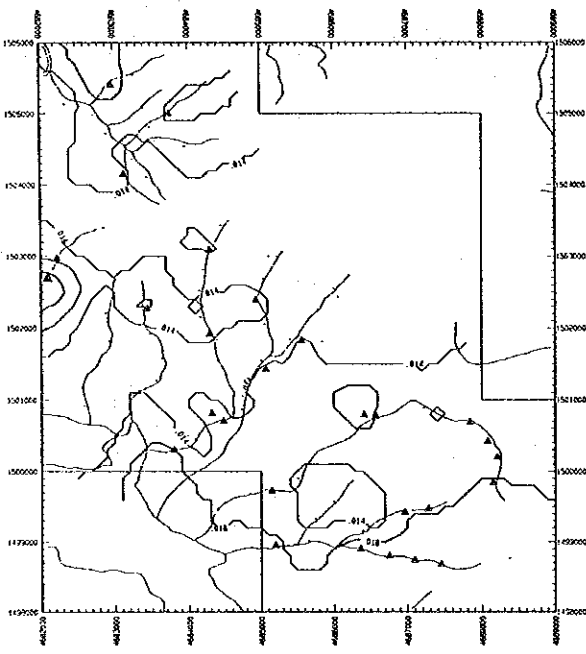
Stream Sediments



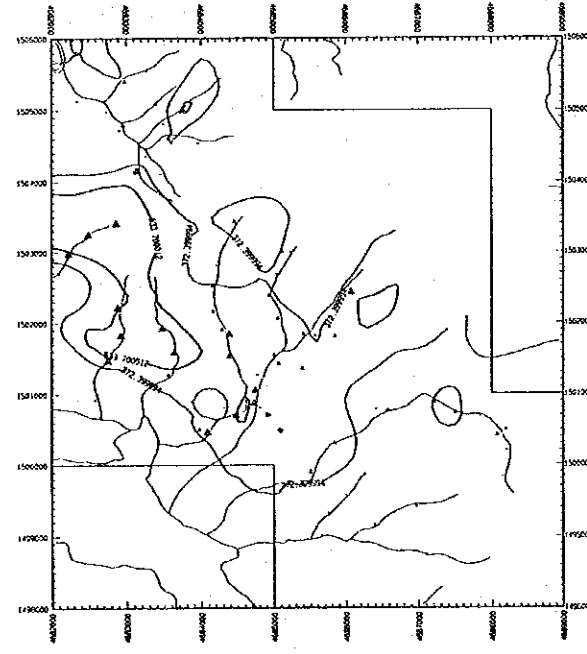
**Ni**    ▲ 3880.000  
           ● 2969.000



**Pb**    ▲ 1.651

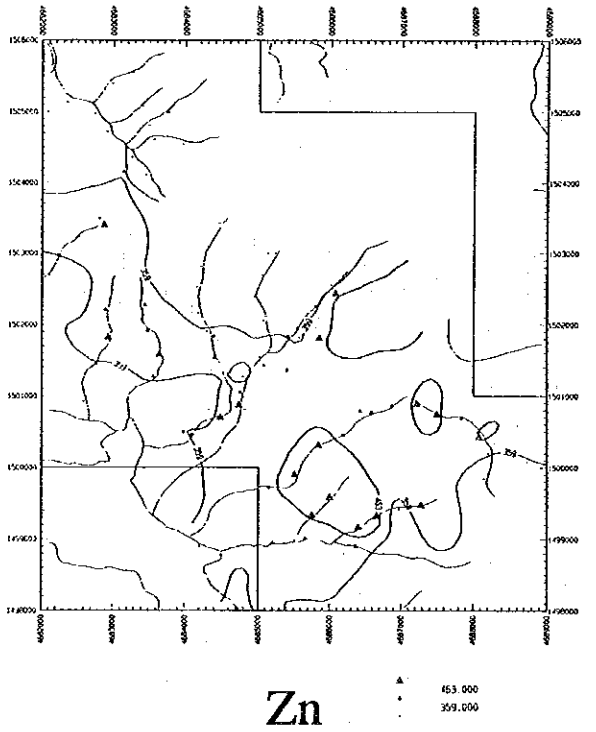
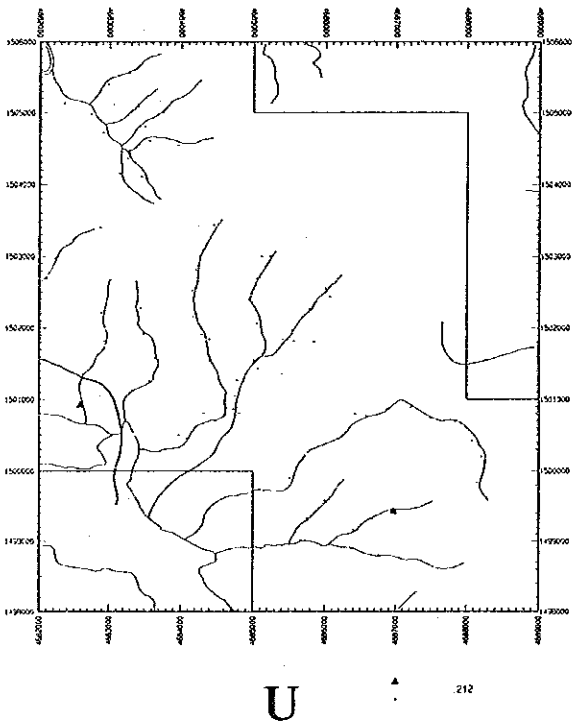
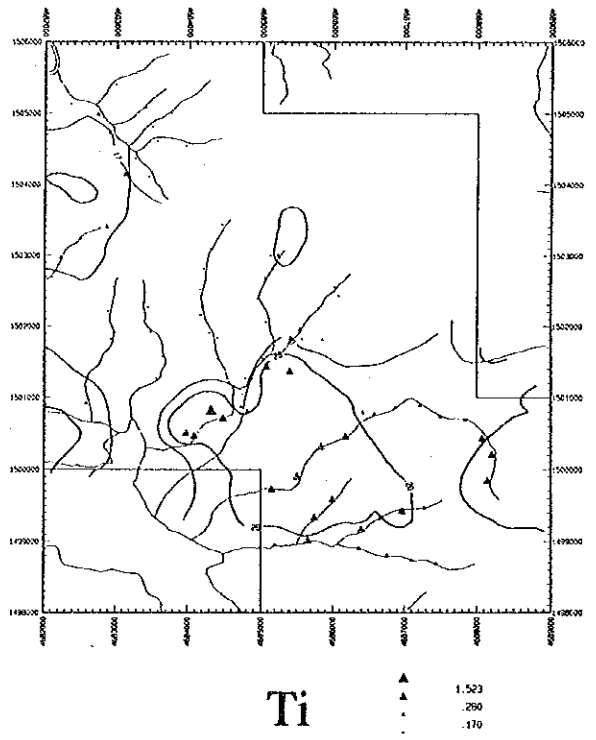
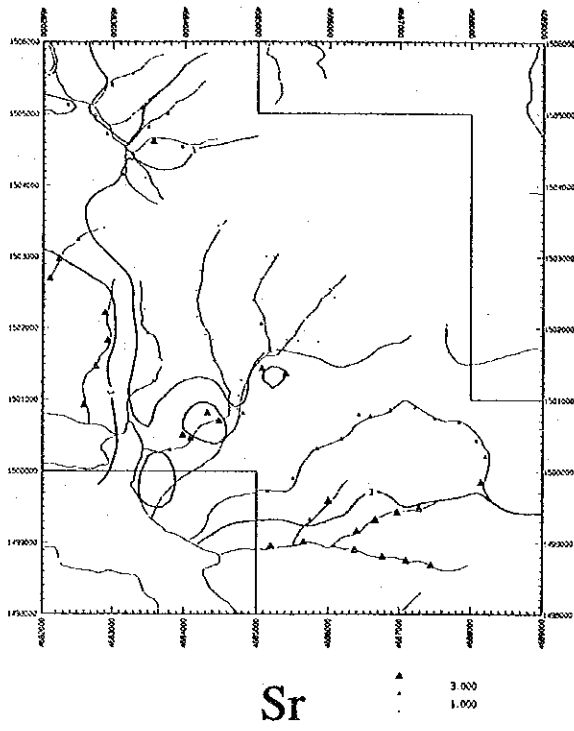


**S**    ▲ 0.25  
           ● .018  
           ● .014



**Sb**    ▲ 533.700  
           ● 372.400

Stream Sediments





Appendix 22

List of stream sediment geochemical samples in Area Q



Ser. No.	Sample No.	Coordinates		Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow *1	Size *2	Color
		N	E								
1	LQ501	1505.13	4682.35	S. Karamuak	peridotite	Pr	2	4.0	2	1	B.
2	LQ502	1504.98	4682.74	S. Karamuak	peridotite	Pr	2	3.0	2	2	B.
3	LQ503	1504.72	4682.91	S. Karamuak	peridotite	Pr	2	3.0	2	2	B.
4	LQ504	1504.44	4683.27	S. Karamuak	peridotite	Pr	2	2.0	2	1	D.G.
5	LQ505	1504.61	4683.56	S. Karamuak	peridotite	Pr	2	2.0	2	1	D.G.
6	LQ506	1504.54	4683.96	S. Karamuak	peridotite	Pr	2	1.0	2	1	D.G.
7	LQ507	1505.40	4682.98	S. Karamuak	peridotite	Pr	1	2.0	2	1	D.G.
8	LQ508	1505.55	4683.27	S. Karamuak	peridotite	Pr	1	1.5	2	1	D.G.
9	LQ509	1504.79	4682.96	S. Karamuak	peridotite	Pr	1	1.5	2	2	B.
10	LQ510	1505.08	4683.40	S. Karamuak	peridotite	Pr	1	1.5	2	1	D.G.
11	LQ511	1504.81	4683.49	S. Karamuak	peridotite	Pr	1	2.0	2	1	D.G.
12	LQ512	1505.00	4683.75	S. Karamuak	peridotite	Pr	1	0.5	2	1	D.G.
13	LQ513	1504.15	4683.14	S. Karamuak	peridotite	Pr	1	1.5	2	2	D.G.
14	LQ514	1504.36	4683.26	S. Karamuak	peridotite	Pr	1	1.0	2	1	D.G.
15	LQ515	1504.11	4683.45	S. Karamuak	peridotite	Pr	1	1.0	2	1	D.G.
16	LQ516	1502.69	4682.10	S. Karamuak	peridotite	Pr	1	1.0	2	1	R.B.
17	LQ517	1502.97	4682.23	S. Karamuak	peridotite	Pr	1	1.0	2	3	R.B.
18	LQ518	1503.24	4682.50	S. Karamuak	serpentinite	Pr	1	1.5	2	3	R.B.
19	LQ519	1503.40	4682.87	S. Karamuak	serpentinite	Pr	1	0.5	2	3	R.B.
20	LQ520	1500.92	4682.59	S. Karamuak	—	PaCr	1	1.5	1	4	D.B.
21	LQ521	1501.46	4682.76	S. Karamuak	—	Pr	1	1.5	2	4	D.B.
22	LQ522	1501.82	4682.93	S. Karamuak	peridotite	Pr	1	2.0	2	3	D.B.
23	LQ523	1502.21	4682.89	S. Karamuak	peridotite	Pr	1	1.0	2	3	D.B.
24	LQ524	1501.13	4683.33	S. Karamuak	peridotite	Pr	1	2.0	3	3	D.B.
25	LQ525	1501.27	4683.56	S. Karamuak	peridotite	Pr	1	2.0	3	2	D.B.
26	LQ526	1501.58	4683.64	S. Karamuak	peridotite	Pr	1	1.0	3	3	D.B.
27	LQ527	1501.92	4683.48	S. Karamuak	peridotite	Pr	1	2.0	2	2	D.B.
28	LQ528	1502.27	4683.44	S. Karamuak	peridotite	Pr	1	1.0	2	2	D.B.
29	LQ529	1500.30	4683.80	S. Pinanduan	—	Pr	2	1.5	2	3	B.
30	LQ530	1500.46	4684.09	S. Pinanduan	peridotite	Pr	2	2.5	1	4	B.
31	LQ531	1500.70	4684.48	S. Pinanduan	—	Pr	2	3.0	2	3	B.
32	LQ532	1500.87	4684.73	S. Pinanduan	—	Pr	3	2.0	2	3	B.
33	LQ533	1501.05	4684.75	S. Pinanduan	peridotite	Pr	3	2.5	2	1	B.
34	LQ534	1501.27	4684.78	S. Pinanduan	peridotite	Pr	3	4.0	2	1	D.G.
35	LQ535	1501.55	4685.01	S. Pinanduan	peridotite	Pr	3	4.5	2	2	D.B.
36	LQ536	1502.06	4685.06	S. Pinanduan	peridotite	Pr	2	2.5	2	2	D.G.
37	LQ537	1502.39	4684.94	S. Pinanduan	peridotite	Pr	2	3.0	2	2	D.G.
38	LQ538	1502.69	4685.04	S. Pinanduan	peridotite	Pr	2	2.0	2	1	D.G.
39	LQ539	1503.00	4685.23	S. Pinanduan	serpentinite	Pr	1	0.5	3	1	D.G.
40	LQ540	1503.00	4685.12	S. Pinanduan	peridotite	Pr	1	1.0	3	1	D.G.
41	LQ541	1500.50	4683.98	S. Pinanduan	peridotite	Pr	1	1.5	1	4	B.
42	LQ542	1500.81	4684.32	S. Pinanduan	—	Pr	1	0.5	1	3	B.
43	LQ543	1500.81	4684.81	S. Pinanduan	—	Pr	1	0.5	1	3	B.
44	LQ544	1501.54	4684.40	S. Pinanduan	peridotite	Pr	2	3.0	4	4	B.
45	LQ545	1501.91	4684.29	S. Pinanduan	peridotite	Pr	2	4.0	3	2	B.
46	LQ546	1502.16	4684.17	S. Pinanduan	peridotite	Pr	2	4.0	3	2	D.B.
47	LQ547	1502.52	4684.16	S. Pinanduan	peridotite	Pr	2	2.0	3	4	D.B.
48	LQ548	1502.81	4684.21	S. Pinanduan	peridotite	Pr	2	1.5	4	3	D.B.
49	LQ549	1503.09	4684.30	S. Pinanduan	peridotite	Pr	1	2.0	3	3	D.B.
50	LQ550	1503.43	4684.46	S. Pinanduan	peridotite	Pr	1	1.0	3	3	D.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		Name of Stream	Geology	Geol. Unit	Order	Width (m)	Flow *1	Size *2	Color
		N	E								
51	LQ551	1501.84	4684.39	S. Pinanduan	peridotite	Pr	1	0.5	2	4	B.
52	LQ552	1501.43	4685.07	S. Pinanduan	peridotite	Pr	1	1.0	2	1	D.B.
53	LQ553	1501.36	4685.40	S. Pinanduan	peridotite	Pr	1	0.5	2	1	D.B.
54	LQ554	1501.84	4685.41	S. Pinanduan	peridotite	Pr	2	2.5	3	2	D.B.
55	LQ555	1501.96	4685.54	S. Pinanduan	serpentinite	Pr	2	4.0	3	2	D.B.
56	LQ556	1502.26	4685.79	S. Pinanduan	peridotite	Pr	2	2.0	2	1	D.B.
57	LQ557	1502.55	4686.01	S. Pinanduan	serpentinite	Pr	1	1.0	3	2	D.B.
58	LQ558	1501.82	4685.57	S. Pinanduan	peridotite	Pr	1	1.5	2	2	D.B.
59	LQ559	1501.81	4685.85	S. Pinanduan	peridotite	Pr	1	1.5	3	1	D.B.
60	LQ560	1502.43	4686.07	S. Pinanduan	serpentinite	Pr	1	0.5	4	1	D.B.
61	LQ561	1499.72	4685.15	S. Mabusu	———	P <sub>2</sub> Cr	2	4.5	3	3	B.
62	LQ562	1499.90	4685.51	S. Mabusu	peridotite	Pr	2	3.5	4	3	R.B.
63	LQ563	1500.31	4685.84	S. Mabusu	peridotite	Pr	2	2.0	4	3	B.
64	LQ564	1500.45	4686.18	S. Mabusu	peridotite	Pr	2	5.0	4	2	B.
65	LQ565	1500.77	4686.58	S. Mabusu	peridotite	Pr	2	5.0	3	3	B.
66	LQ566	1500.86	4686.87	S. Mabusu	peridotite	Pr	2	3.0	4	2	B.
67	LQ567	1500.89	4687.22	S. Mabusu	peridotite	Pr	2	4.5	4	2	B.
68	LQ568	1500.74	4687.50	S. Mabusu	peridotite	Pr	2	2.5	4	3	R.B.
69	LQ569	1500.69	4687.84	S. Mabusu	peridotite	Pr	2	6.0	4	3	R.B.
70	LQ570	1500.42	4688.08	S. Mabusu	peridotite	Pr	2	3.5	4	3	R.B.
71	LQ571	1500.20	4688.21	S. Mabusu	peridotite	Pr	1	5.0	4	3	R.B.
72	LQ572	1499.84	4688.15	S. Mabusu	peridotite	Pr	1	6.0	4	3	R.B.
73	LQ573	1500.79	4686.42	S. Mabusu	———	Pr	1	1.0	2	3	B.
74	LQ574	1498.95	4685.20	S. Karamuak	———	P <sub>2</sub> Cr	3	3.0	3	3	B.
75	LQ575	1499.01	4685.66	S. Karamuak	———	P <sub>2</sub> Cr	3	3.0	3	3	B.
76	LQ576	1498.90	4686.37	S. Karamuak	peridotite	Pr	2	3.0	3	3	B.
77	LQ577	1498.80	4686.76	S. Karamuak	peridotite	Pr	2	3.5	2	3	B.
78	LQ578	1498.74	4687.10	S. Karamuak	peridotite	Pr	2	2.5	3	3	B.
79	LQ579	1498.68	4687.45	S. Karamuak	peridotite	Pr	1	3.0	4	1	B.
80	LQ580	1499.33	4685.75	S. Karamuak	peridotite	Pr	1	3.5	2	2	D.B.
81	LQ581	1499.58	4686.00	S. Karamuak	———	Pr	1	2.5	2	2	B.
82	LQ582	1499.16	4686.40	S. Karamuak	———	Pr	2	2.0	2	3	B.
83	LQ583	1499.32	4686.66	S. Karamuak	———	Pr	2	1.5	2	2	B.
84	LQ584	1499.42	4686.97	S. Karamuak	———	Pr	1	2.0	2	3	R.B.
85	LQ585	1499.47	4687.28	S. Karamuak	peridotite	Pr	1	1.0	3	3	R.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 23

Analytical results of stream sediment  
geochemical samples in Area 0







List of Geochemical Analysis ( 2 )

Ser. No.	Sample No.	Location (km)	X-coord	Y-coord	AS	Au	Ba	Co	Cr	Cu	Hg	K	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Sr	Ti	U	W	Zn
					ppm	ppb	ppm	ppm	ppm	ppm	ppb	%	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm
51	L0551	4684.390	1501.840	35	>	10	520	6722	6706	1117	122	.03	1.56	3042	>	.01	4356	>	.01	539.6	>	.07	>	>	418
52	L0552	4685.070	1501.430	11	6	8	392	6706	6706	69	85	.04	3.92	3482	>	.06	2699	>	.02	485.3	8	.56	>	>	431
53	L0553	4685.400	1501.360	2	1	4	244	6843	6843	31	86	.04	2.57	2169	>	.04	1757	>	.01	474.9	5	.74	>	>	409
54	L0554	4685.410	1501.840	36	41	5	305	6825	6825	96	82	.04	2.21	1946	>	.02	3229	>	.01	491.9	>	.17	>	>	391
55	L0555	4685.540	1501.960	46	4	9	366	6879	6879	89	89	.03	2.72	3052	>	.01	3954	>	.01	356.4	>	.24	>	>	319
56	L0556	4685.850	1502.260	>	>	10	457	7084	7084	130	81	.04	3.88	3985	>	.02	4369	>	.02	293.2	>	.07	>	>	325
57	L0557	4686.010	1502.550	31	2	6	273	7050	7050	38	47	.03	2.78	2285	>	.01	2803	>	.008	359.6	>	.05	>	>	316
58	L0558	4685.570	1501.820	24	1	7	421	7186	7186	98	105	.04	1.80	2287	>	.02	4355	>	.018	298.1	>	.10	>	>	324
59	L0559	4685.850	1501.810	24	20	7	346	6818	6818	90	72	.04	3.90	2590	>	.02	4040	>	.012	529.6	>	.11	>	>	466
60	L0560	4686.070	1502.430	27	2	8	320	6815	6815	59	40	.04	4.48	2794	>	.02	3351	>	.008	547.3	>	.06	>	>	528
61	L0561	4685.150	1499.720	16	>	8	352	6953	6953	39	86	.04	5.52	2844	>	.08	2747	>	.016	374.2	2	.32	>	>	457
62	L0562	4685.510	1499.900	18	1	11	329	6904	6904	34	71	.05	5.31	2669	>	.10	2524	>	.013	425.1	2	.35	>	>	502
63	L0563	4685.840	1500.310	6	>	5	344	6849	6849	28	100	.04	5.41	3060	>	.05	2528	>	.014	488.9	1	.36	>	>	545
64	L0564	4686.180	1500.450	1	>	6	325	7011	7011	26	57	.04	5.95	2788	>	.10	2600	>	.014	355.1	1	.31	>	>	437
65	L0565	4686.580	1500.770	8	>	6	358	6957	6957	35	71	.04	7.01	2760	>	.17	3136	>	.017	376.0	1	.26	>	>	441
66	L0566	4686.870	1500.860	1	>	13	379	7106	7106	36	81	.05	6.59	3019	>	.13	3434	>	.015	260.5	2	.24	>	>	368
67	L0567	4687.220	1500.890	1	>	7	311	6932	6932	27	59	.04	7.04	2573	>	.08	2529	>	.014	380.1	2	.26	>	>	489
68	L0568	4687.500	1500.740	20	>	7	328	6916	6916	31	83	.04	5.63	2295	>	.05	2983	>	.013	423.4	1	.26	>	>	488
69	L0569	4687.840	1500.690	13	>	19	339	7081	7081	32	69	.05	7.63	2655	>	.11	2998	>	.016	285.3	2	.26	>	>	387
70	L0570	4688.080	1500.420	1	>	5	285	6938	6938	25	65	.04	7.07	2247	>	.10	2441	>	.016	398.2	2	.28	>	>	504
71	L0571	4688.210	1500.200	9	>	14	391	7132	7132	52	87	.05	3.71	2587	>	.13	2324	>	.017	238.3	2	.30	>	>	332
72	L0572	4688.150	1499.840	19	>	35	429	7155	7155	57	112	.06	2.68	2655	>	.15	2647	>	.018	220.3	3	.30	>	>	314
73	L0573	4686.420	1500.790	18	>	11	332	7051	7051	23	108	.05	7.16	1974	>	.13	2994	>	.022	315.3	2	.27	>	>	415
74	L0574	4685.200	1499.950	1	>	32	190	7299	7299	35	65	.08	6.03	1506	>	.20	1925	>	.019	189.5	6	.25	>	>	368
75	L0575	4685.660	1499.010	4	>	28	223	7244	7244	42	76	.09	4.40	2045	>	.13	1855	>	.015	227.7	6	.28	>	>	398
76	L0576	4686.370	1498.900	2	>	29	190	7282	7282	21	66	.06	7.57	1286	>	.30	1799	>	.023	196.8	8	.20	>	>	407
77	L0577	4686.760	1498.800	3	>	10	238	7301	7301	33	67	.05	8.21	1792	>	.31	2132	>	.022	143.8	6	.20	>	>	313
78	L0578	4687.100	1498.740	9	>	8	269	7207	7207	45	57	.05	7.79	2249	>	.33	2548	>	.023	169.7	6	.22	>	>	345
79	L0579	4687.450	1498.680	18	>	14	233	7252	7252	30	41	.06	9.96	2321	>	.35	2392	>	.023	152.7	8	.20	>	>	353
80	L0580	4685.750	1499.330	6	>	15	238	7194	7194	31	72	.06	4.75	1598	>	.17	1701	>	.012	297.9	2	.31	>	>	474
81	L0581	4686.000	1499.580	10	>	17	260	7135	7135	30	57	.05	6.05	1967	>	.15	1946	>	.013	310.9	3	.28	>	>	505
82	L0582	4686.400	1499.160	2	>	14	185	7168	7168	40	61	.04	3.37	1902	>	.07	1640	>	.014	321.3	3	.29	>	>	571
83	L0583	4686.660	1499.320	4	>	11	179	7108	7108	37	41	.05	6.31	2313	>	.14	1787	>	.011	337.7	6	.26	>	>	661
84	L0584	4686.970	1499.420	1	>	12	230	7338	7338	214	159	.04	1.26	2270	>	.23	2266	>	.019	91.3	3	.37	>	>	220
85	L0585	4687.280	1499.470	19	>	8	320	7115	7115	189	99	.04	4.63	3255	>	.15	2187	>	.017	254.1	3	.24	>	>	472

Appendix 24

List of soil geochemical samples in Area R



Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegetation
		N	E										
1	LR001	1494.37	4681.40	S. Karamuak	sandstone	P <sub>2</sub> Cr	40	R.B.	F	C	M	W	secondary forest
2	LR002	1494.68	4681.95	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	F	S	F	W	secondary forest
3	LR003	1494.25	4681.88	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	F	C	F	W	secondary forest
4	LR004	1494.48	4682.66	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	F	S	F	W	secondary forest
5	LR005	1494.02	4682.85	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	F	S	M	W	secondary forest
6	LR006	1494.62	4683.44	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	F	C	F	W	secondary forest
7	LR007	1494.25	4683.74	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	F	S	F	W	secondary forest
8	LR008	1493.86	4681.48	S. Karamuak	—	P <sub>2</sub> Cr	40	R.B.	F	R	F	W	secondary forest
9	LR009	1493.35	4681.35	S. Karamuak	—	P <sub>2</sub> Cr	40	B.	R	C	M	W	secondary forest
10	LR010	1493.45	4681.90	S. Karamuak	—	P <sub>2</sub> Cr	40	B.	R	C	M	W	secondary forest
11	LR011	1493.15	4682.37	S. Karamuak	perid. boulder	Csba	40	D.B.	F	S	F	W	secondary forest
12	LR012	1493.50	4682.90	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	R	S	M	W	secondary forest
13	LR013	1493.70	4683.50	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.	R	S	F	W	secondary forest
14	LR014	1493.18	4683.87	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.	R	S	M	W	secondary forest
15	LR015	1493.80	4684.28	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	R	S	F	W	secondary forest
16	LR016	1493.20	4684.48	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.	R	S	F	W	secondary forest
17	LR017	1493.16	4685.40	S. Karamuak	—	P <sub>2</sub> Cr	40	B.	R	S	F	W	secondary forest
18	LR018	1492.86	4681.48	S. Karamuak	—	Csba	40	D.B.	F	S	M	W	secondary forest
19	LR019	1492.32	4681.53	S. Karamuak	—	Csba	40	D.B.	F	S	M	W	secondary forest
20	LR020	1492.78	4682.00	S. Karamuak	—	Csba	40	D.B.	F	S	M	W	secondary forest
21	LR021	1492.55	4682.45	S. Karamuak	dolerite	Csba	40	D.B.	F	S	F	W	secondary forest
22	LR022	1492.48	4682.97	S. Karamuak	—	P <sub>2</sub> Cr	40	R.B.	F	S	F	W	secondary forest
23	LR023	1492.95	4683.20	S. Karamuak	sandstone	P <sub>2</sub> Cr	40	Y.	R	C	M	W	secondary forest
24	LR024	1492.55	4683.77	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	R	C	F	W	secondary forest
25	LR025	1492.74	4684.34	S. Karamuak	—	P <sub>2</sub> Cr	40	B.	R	S	F	W	secondary forest
26	LR026	1492.03	4684.43	S. Karamuak	—	P <sub>2</sub> Cr	40	R.B.	F	C	M	W	secondary forest
27	LR027	1492.94	4684.90	S. Karamuak	—	P <sub>2</sub> Cr	40	B.	R	C	F	W	secondary forest
28	LR028	1492.45	4685.44	S. Karamuak	—	P <sub>2</sub> Cr	40	R.B.	R	C	M	W	secondary forest
29	LR029	1491.35	4681.45	S. Karamuak	peridotite	Pr	40	D.B.	F	S	S	W	primary forest
30	LR030	1491.66	4681.80	S. Karamuak	peridotite	Pr	40	D.B.	F	S	S	W	primary forest

\*1 Gravel: Many (M), Few (F), Rare or none (R)

\*2 Topography: Steep (S), Moderate (M), Flat (F)

\*3 Grain size: Sandy (S), Clayey (C)

\*4 Humidity: Dry (D), Wet (W)

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. #1	S. #2	T. #3	H. #4	Vegetation
		N	E										
31	LR031	1491.98	4682.11	S. Karamuak	—	Csba	40	R.B.	F	C	M	W	secondary forest
32	LR032	1491.02	4682.24	S. Karamuak	peridotite	Pr	40	R.B.	R	S	M	W	secondary forest
33	LR033	1491.92	4682.83	S. Karamuak	—	P <sub>2</sub> Cr	40	R.B.	F	S	M	W	secondary forest
34	LR034	1491.26	4682.72	S. Karamuak	serpentinite	Pr	40	D.B.	F	S	S	W	secondary forest
35	LR035	1491.71	4683.45	S. Karamuak	—	P <sub>2</sub> Cr	40	R.B.	R	S	M	W	secondary forest
36	LR036	1491.14	4683.43	S. Karamuak	—	Gs	40	D.B.	R	S	M	W	secondary forest
37	LR037	1491.43	4684.07	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	R	S	M	W	primary forest
38	LR038	1491.21	4684.60	S. Karamuak	—	P <sub>2</sub> Cr	40	R.B.	F	S	M	W	secondary forest
39	LR039	1491.95	4685.18	S. Karamuak	—	P <sub>2</sub> Cr	40	Y.B.	F	S	M	W	secondary forest
40	LR040	1491.34	4685.35	S. Karamuak	—	P <sub>2</sub> Cr	10	B.	R	C	M	W	secondary forest
41	LR041	1490.88	4681.87	S. Karamuak	peridotite	Pr	40	R.B.	R	S	S	W	primary forest
42	LR042	1490.22	4682.28	S. Karamuak	peridotite	Pr	40	D.B.	F	S	S	W	primary forest
43	LR043	1490.57	4682.63	S. Karamuak	peridotite	Pr	40	D.B.	F	S	M	W	secondary forest
44	LR044	1490.34	4683.32	S. Karamuak	peridotite	Pr	40	D.B.	F	C	M	W	secondary forest
45	LR045	1490.77	4683.78	S. Karamuak	peridotite	Pr	40	D.B.	M	C	S	W	secondary forest
46	LR046	1490.08	4683.87	S. Karamuak	peridotite	Pr	40	D.B.	F	C	F	W	secondary forest
47	LR047	1490.60	4684.15	S. Karamuak	—	Pr	30	D.B.	F	C	M	W	secondary forest
48	LR048	1490.48	4684.53	S. Karamuak	peridotite	Pr	15	B.	F	C	S	W	primary forest
49	LR049	1490.64	4685.15	S. Karamuak	green schist	Gs	15	L.B.	R	C	S	W	primary forest
50	LR050	1490.72	4685.67	S. Karamuak	—	Gs	20	B.	R	C	S	W	primary forest
51	LR051	1489.79	4683.05	S. Karamuak	peridotite	Pr	40	D.B.	F	S	S	W	primary forest
52	LR052	1489.41	4683.55	S. Karamuak	—	Pr	40	D.B.	R	S	S	W	primary forest
53	LR053	1489.73	4684.23	S. Karamuak	perid. boulder	Pr	40	D.B.	F	S	M	W	primary forest
54	LR054	1489.38	4684.52	S. Karamuak	perid. boulder	Pr	40	D.B.	R	S	F	W	secondary forest
55	LR055	1489.55	4685.50	S. Karamuak	peridotite	Pr	25	D.B.	F	C	S	W	secondary forest
56	LR056	1489.26	4685.65	S. Karamuak	—	Pr	20	D.B.	M	C	M	W	secondary forest
57	LR057	1489.13	4686.25	S. Karamuak	peridotite	Pr	30	B.	R	C	S	W	primary forest
58	LR058	1489.16	4686.76	S. Karamuak	peridotite	Pr	30	B.	R	C	S	W	primary forest
59	LR059	1489.40	4687.35	S. Karamuak	peridotite	Pr	30	B.	R	C	S	W	primary forest
60	LR060	1489.13	4687.75	S. Karamuak	peridotite	Pr	30	B.	R	C	S	W	primary 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)

Ser. No.	Sample No.	Coordinates		1/50,000 Topo. Sheet	Rock of Basement	Geol. Unit	Depth (cm)	Color	G. *1	S. *2	T. *3	H. *4	Vegetation
		N	E										
61	LR061	1489.54	4688.73	S. Karamuak	peridotite	Pr	25	B.	F	C	S	W	primary forest
62	LR062	1489.20	4688.63	S. Karamuak	peridotite	Pr	30	B.	R	C	S	W	primary forest
63	LR063	1489.28	4689.15	S. Karamuak	sandstone	P <sub>2</sub> Cr	30	Y.B.	R	C	S	W	primary forest
64	LR064	1489.68	4689.85	S. Karamuak	—	Pr	30	B.	M	C	S	W	primary forest
65	LR065	1489.40	4690.25	S. Karamuak	green schist	Gs	30	B.	M	C	S	W	primary forest
66	LR066	1489.13	4690.83	S. Karamuak	—	Pr	30	B.	M	C	S	W	primary forest
67	LR067	1488.56	4683.52	S. Karamuak	peridotite	Pr	20	B.	F	C	S	W	secondary forest
68	LR068	1488.98	4684.12	S. Karamuak	harzburgite	Pr	30	D.B.	M	C	S	W	secondary forest
69	LR069	1488.62	4684.31	S. Karamuak	harzburgite	Pr	40	B.	M	C	S	W	secondary forest
70	LR070	1488.95	4684.72	S. Karamuak	green schist	Gs	20	B.	F	C	S	W	secondary forest
71	LR071	1488.23	4684.78	S. Karamuak	—	Pr	20	B.	F	C	F	W	bush
72	LR072	1488.46	4685.10	S. Karamuak	—	Gs	15	R.B.	F	C	F	W	secondary forest
73	LR073	1488.71	4685.32	S. Karamuak	—	Gs	15	B.	R	C	M	W	secondary forest
74	LR074	1488.40	4685.64	S. Karamuak	peridotite	Pr	15	R.B.	R	C	M	W	secondary forest
75	LR075	1488.30	4686.18	S. Karamuak	—	Pr	15	B.	F	C	M	W	secondary forest
76	LR076	1488.54	4686.72	S. Karamuak	peridotite	Pr	30	B.	R	C	M	W	primary forest
77	LR077	1488.36	4687.10	S. Karamuak	peridotite	Pr	30	B.	R	C	M	W	primary forest
78	LR078	1488.57	4687.80	S. Karamuak	peridotite	Pr	30	B.	R	C	M	W	primary forest
79	LR079	1488.15	4688.45	S. Karamuak	peridotite	Pr	25	B.	R	C	M	W	primary forest
80	LR080	1488.96	4689.31	S. Karamuak	sandstone	P <sub>2</sub> Cr	20	Y.B.	R	C	S	W	primary forest
81	LR081	1488.27	4689.75	S. Karamuak	basalt	Csba	30	B.	M	S	F	W	secondary forest
82	LR082	1488.75	4690.20	S. Karamuak	serpentinite	Pr	30	B.	M	C	M	W	secondary forest
83	LR083	1488.35	4690.60	S. Karamuak	serpentinite	Pr	30	B.	M	C	M	W	secondary forest
84	LR084	1487.90	4683.52	S. Karamuak	peridotite	Pr	15	D.B.	R	C	M	W	secondary forest
85	LR085	1487.45	4683.27	S. Karamuak	peridotite	Pr	30	D.B.	F	C	M	W	secondary forest
86	LR086	1487.26	4683.95	S. Karamuak	—	Pr	15	B.	R	C	M	W	secondary forest
87	LR087	1487.80	4684.33	S. Karamuak	peridotite	Pr	30	D.B.	M	C	S	W	secondary forest
88	LR088	1486.95	4684.37	S. Karamuak	—	Pr	20	D.B.	F	C	M	W	secondary forest
89	LR089	1487.64	4684.81	S. Karamuak	peridotite	Pr	20	R.B.	M	C	M	W	secondary forest
90	LR090	1487.83	4685.25	S. Karamuak	peridotite	Pr	25	R.B.	F	C	M	W	secondary forest

\*1Gravel: Many (M), Few (F), Rare or none (R)  
 \*2Topography: Steep (S), Moderate (M), Flat (F)

\*3Grain size: Sandy (S), Clayey (C)  
 \*4Humidity: Dry (D), Wet (W)