

Appendix 21 Statistics of auger geochemical survey histogram, EDA
and cumulative frequency of each elements in Block B

***** Base Statistics *****

File: auger_b.dat

----- Geological Code(Ncd:1) -----

1:

----- Elements(Nel:18) -----

1:Au	2:Ag	3:Cu	4:Pb	5:Zn
6:Fe	7:As	8:Sb	9:Hg	10:Bi
11:Cd	12:Co	13:Ni	14:V	15:Mn
16:Mo	17:K	18:W		

Number of datas : 621 (621)

***** Base Statistics *****

Elements	Mean	Var.	S.D.	Min	Max	Mean+2SD
Au	21.330	0.209*	0.457*	0.500	2443.000	175.374 (LOG)
Ag	0.106	0.016*	0.126*	0.100	1.200	0.189 (LOG)
Cu	11.924	0.188*	0.434*	0.500	85.000	87.802 (LOG)
Pb	15.399	0.104*	0.323*	2.000	482.000	68.041 (LOG)
Zn	14.278	0.049*	0.221*	4.000	125.000	39.438 (LOG)
Fe	2.433	0.078*	0.279*	0.160	10.000	8.785 (LOG)
As	2.899	0.032*	0.180*	2.500	29.000	6.647 (LOG)
Sb	1.022	0.005*	0.070*	1.000	5.000	1.413 (LOG)
Hg	0.047	0.148*	0.385*	0.005	0.190	0.278 (LOG)
Bi	0.758	0.108*	0.328*	0.500	62.000	3.435 (LOG)
Cd	0.116	0.022*	0.147*	0.100	0.400	0.229 (LOG)
Co	1.553	0.099*	0.315*	0.500	36.000	6.617 (LOG)
Ni	2.782	0.116*	0.341*	0.500	19.000	13.368 (LOG)
V	36.974	0.134*	0.366*	1.000	442.000	199.541 (LOG)
Mn	77.471	0.205*	0.453*	9.000	4860.000	622.918 (LOG)
Mo	2.179	0.312*	0.558*	0.500	65.000	28.498 (LOG)
K	0.042	0.073*	0.271*	0.005	0.410	0.147 (LOG)
W	10.000	0.000*	0.000*	10.000	10.000	10.000 (LOG)

*:LOG

==== Detection Limit =====

Elements	B D L	A D L (%)
Au	0.644	0.000
Ag	95.974	0.000
Cu	0.483	0.000
Pb	0.000	0.000
Zn	0.000	0.000
Fe	0.000	0.000
As	87.440	0.000
Sb	90.068	0.000
Hg	4.509	0.000
Bi	74.396	0.000
Cd	82.931	0.000
Co	17.391	0.000
Ni	8.213	0.000
V	0.000	0.000
Mn	0.000	0.000
Mo	27.058	0.000
K	0.805	0.000
W	100.000	0.000

==== Correlation Matrix =====

	Au	Ag	Cu	Pb	Zn	Fe	As	Sb	Hg	Bi	Cd	Co
Au	1.000											
Ag	0.018	1.000										
Cu	0.260	-0.012	1.000									
Pb	-0.008	0.144	0.130	1.000								
Zn	0.026	0.113	0.100	0.560	1.000							
Fe	0.222	0.067	0.351	0.184	0.318	1.000						
As	0.199	0.232	0.074	0.229	0.269	0.438	1.000					
Sb	-0.005	-0.026	-0.057	-0.009	0.000	-0.169	-0.022	1.000				
Hg	0.391	0.032	0.334	-0.159	0.149	0.455	0.185	-0.032	1.000			
Bi	0.245	0.032	0.341	0.152	-0.001	0.083	0.123	0.003	0.183	1.000		
Cd	0.116	0.079	0.400	0.117	0.036	0.197	0.081	-0.060	0.202	0.143	1.000	
Co	0.002	0.081	0.499	0.564	0.483	0.508	0.114	-0.154	0.209	0.106	0.287	1.000
Ni	-0.082	-0.152	0.560	0.124	0.070	0.086	-0.158	-0.138	0.097	0.118	0.389	0.465
V	0.211	0.081	0.423	0.139	0.308	0.930	0.409	-0.174	0.495	0.070	0.181	0.547
Mn	0.042	0.134	0.064	0.640	0.570	0.288	0.240	-0.018	0.090	0.094	0.036	0.601
Mo	0.203	0.095	0.740	0.040	-0.107	0.256	0.226	-0.082	0.175	0.357	0.335	0.240
K	-0.092	-0.017	-0.334	0.187	0.253	-0.232	-0.043	0.014	-0.211	-0.210	-0.087	-0.106
W	? .000	? .000	? .000	? .000	? .000	? .000	? .000	? .000	? .000	? .000	? .000	? .000

	Ni	V	Mn	Mo	K	W
Ni	1.000					
V	0.164	1.000				
Mn	0.037	0.260	1.000			
Mo	0.371	0.284	-0.098	1.000		
K	-0.150	-0.380	0.188	-0.296	1.000	
W	? .000	? .000	? .000	? .000	? .000	1.000

===== EDA Analysis =====

Elements	L.Fence	L.Wisker	L.Hinge	Median	U.Hinge	U.Wisker	U.Fence
Au	2.216	9.000	12.000	22.000	37.000	44.000	200.324
Ag	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Cu	0.665	5.000	6.000	12.000	26.000	34.000	234.534
Pb	2.203	8.000	9.000	14.000	23.000	28.000	93.963
Zn	3.818	9.000	10.000	14.000	19.000	21.000	49.760
Fe	0.552	1.470	1.660	2.510	3.460	3.810	10.412
As	2.500	2.500	2.500	2.500	2.500	2.500	2.500
Sb	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Hg	0.005	0.020	0.030	0.060	0.100	0.110	0.609
Bi	0.177	0.500	0.500	0.500	1.000	2.000	2.828
Cd	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Co	0.354	1.000	1.000	2.000	2.000	3.000	5.657
Ni	0.506	1.000	2.000	3.000	5.000	6.000	19.764
V	6.557	19.000	24.000	40.000	57.000	64.000	208.627
Mn	5.368	29.000	37.000	70.000	134.000	182.000	923.548
Mo	0.012	0.500	0.500	2.000	6.000	7.000	249.415
K	0.011	0.030	0.030	0.040	0.060	0.070	0.170
W	10.000	10.000	10.000	10.000	10.000	10.000	10.000

***** Factor Analysis *****

File: auger_b.dat

----- Geological Code(Ncd:1) -----

1:

----- Elements(Nel: 17) -----

1:Au	2:Ag	3:Cu	4:Pb	5:Zn
6:Fe	7:As	8:Sb	9:Hg	10:Bi
11:Cd	12:Co	13:Ni	14:V	15:Mn
16:Mo	17:K			

Number of datas : 621 (621)

===== Eigen Value =====

Trace(Max. of Correlation Coefficient): 9.217

Number of factors : 6

N fact	EigenValue	%	Cum%
1	4.117	44.671	44.671
2	2.173	23.571	68.243
3	1.457	15.809	84.052
4	0.852	9.239	93.291
5	0.525	5.700	98.991
6	0.335	3.637	102.628

===== Factor Loading =====

(before rotation)

Elements	1	2	3	4	5	6	Comm.
Au	0.279	-0.181	0.232	0.358	0.319	-0.023	0.394
Ag	0.126	0.131	0.088	0.243	-0.232	-0.135	0.172
Cu	0.692	-0.436	-0.333	0.062	0.062	0.038	0.789
Pb	0.413	0.603	-0.337	0.183	-0.109	0.089	0.700
Zn	0.432	0.605	-0.050	0.027	0.136	-0.078	0.580
Fe	0.796	0.050	0.467	-0.208	-0.095	-0.033	0.908
As	0.394	0.160	0.331	0.324	-0.224	-0.122	0.460
Sb	-0.151	0.030	-0.001	0.164	0.096	0.101	0.070
Hg	0.470	-0.214	0.321	0.028	0.392	-0.078	0.531
Bi	0.291	-0.203	-0.123	0.386	0.080	0.226	0.347
Cd	0.389	-0.205	-0.248	0.020	0.040	-0.326	0.363
Co	0.731	0.268	-0.284	-0.205	0.012	0.067	0.734
Ni	0.397	-0.250	-0.546	-0.300	0.071	-0.069	0.618
V	0.826	-0.032	0.441	-0.275	-0.095	0.071	0.968
Mn	0.449	0.652	-0.120	0.091	0.102	0.114	0.673
Mo	0.522	-0.528	-0.239	0.280	-0.257	-0.049	0.756
K	-0.265	0.454	-0.128	0.078	0.118	-0.286	0.394

===== Factor Loading =====
 (after rotation Varimax)

Elements	1	2	3	4	5	6	Comm.
Au	0.023	-0.007	0.026	0.127	0.583	0.193	0.394
Ag	0.003	0.093	0.016	0.403	-0.011	0.014	0.172
Cu	0.649	0.105	0.224	-0.060	0.215	0.507	0.789
Pb	0.096	0.784	-0.043	0.208	-0.147	0.102	0.700
Zn	0.036	0.708	0.130	0.124	0.123	-0.172	0.580
Fe	0.110	0.237	0.846	0.222	0.270	0.046	0.908
As	-0.046	0.178	0.255	0.563	0.194	0.080	0.460
Sb	-0.154	-0.002	-0.195	-0.018	0.066	0.062	0.070
Hg	0.136	0.009	0.348	-0.039	0.621	0.063	0.531
Bi	0.116	0.094	-0.086	0.079	0.241	0.503	0.347
Cd	0.572	0.051	0.062	0.082	0.145	0.030	0.363
Co	0.390	0.642	0.382	-0.072	-0.024	0.136	0.734
Ni	0.670	0.135	0.111	-0.325	-0.102	0.153	0.618
V	0.123	0.207	0.904	0.124	0.240	0.141	0.968
Mn	-0.041	0.806	0.092	0.096	0.059	-0.006	0.673
Mo	0.577	-0.127	0.124	0.275	0.077	0.557	0.756
K	-0.074	0.249	-0.358	0.083	-0.047	-0.436	0.394

N fact	Contribution	%	Cum%
1	1.786	19.373	19.373
2	2.437	26.436	45.810
3	2.148	23.300	69.110
4	0.840	9.112	78.222
5	1.083	11.747	89.969
6	1.167	12.659	102.628

===== Factor Score =====

Elements	<Weight>					
	1	2	3	4	5	6
Au	-0.039	0.001	-0.106	0.021	0.343	0.031
Ag	0.034	-0.013	0.000	0.224	-0.029	-0.040
Cu	0.263	0.076	-0.094	-0.273	0.220	0.270
Pb	-0.036	0.331	-0.084	0.148	-0.165	0.190
Zn	0.051	0.223	-0.100	0.085	0.120	-0.197
Fe	0.169	0.009	0.150	0.381	0.230	-0.470
As	-0.002	0.001	-0.084	0.310	0.051	-0.011
Sb	-0.072	0.015	-0.013	-0.020	0.042	0.063
Hg	0.040	0.001	-0.091	-0.075	0.421	-0.065
Bi	-0.109	0.040	-0.036	-0.039	0.102	0.281
Cd	0.268	-0.035	-0.042	0.095	0.074	-0.161
Co	0.157	0.172	-0.041	-0.155	-0.153	-0.040
Ni	0.316	0.029	0.056	-0.230	-0.098	-0.125
V	-0.374	-0.067	0.997	-0.297	-0.250	0.407
Mn	-0.117	0.347	-0.047	-0.014	0.080	0.087
Mo	0.248	-0.161	-0.066	0.492	-0.172	0.308
K	0.071	0.048	0.017	0.019	0.038	-0.202

Ag

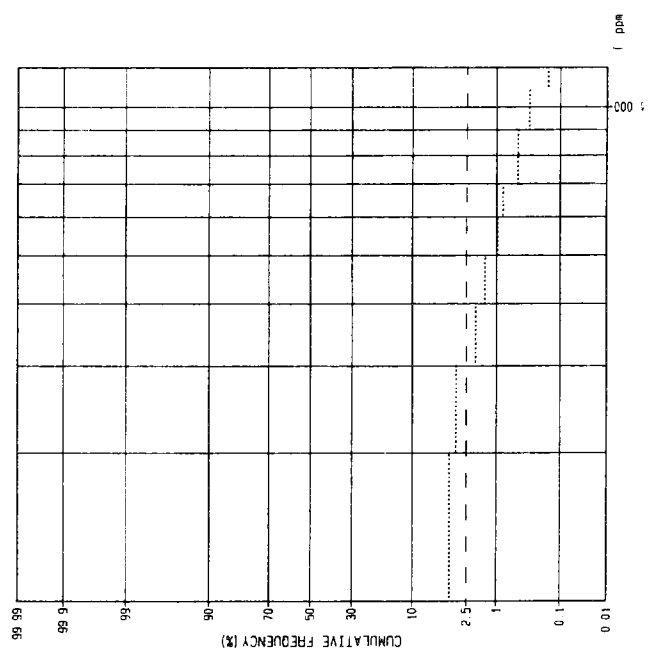
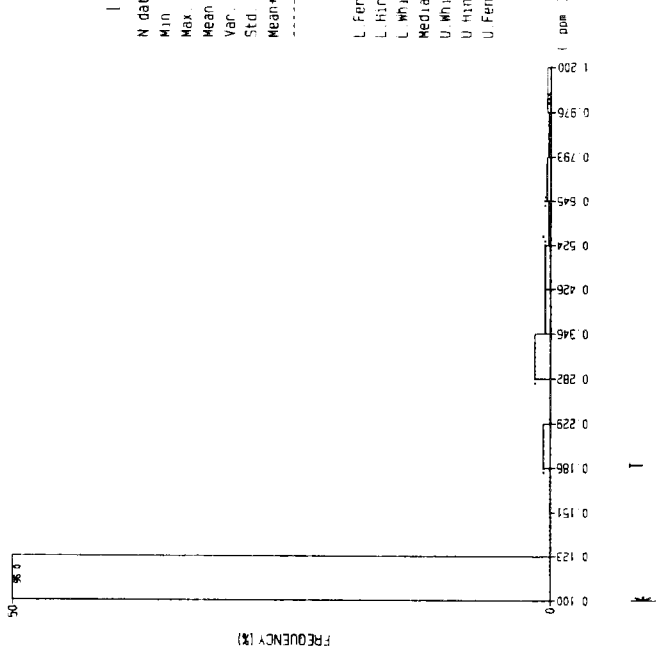
(ppm)

[Statistics]

N data = 621
 Min = 0.100
 Max = 1.200
 Mean = 0.105
 Var = 0.016 (log10)
 Std = 0.126 (log10)
 Mean±2sd = 0.189

[EDA]

L Fence = 0.100
 L Hinge = 0.100
 L Whisker = 0.100
 Median = 0.100
 U Whisker = 0.100
 U Hinge = 0.100
 U Fence = 0.100



AU

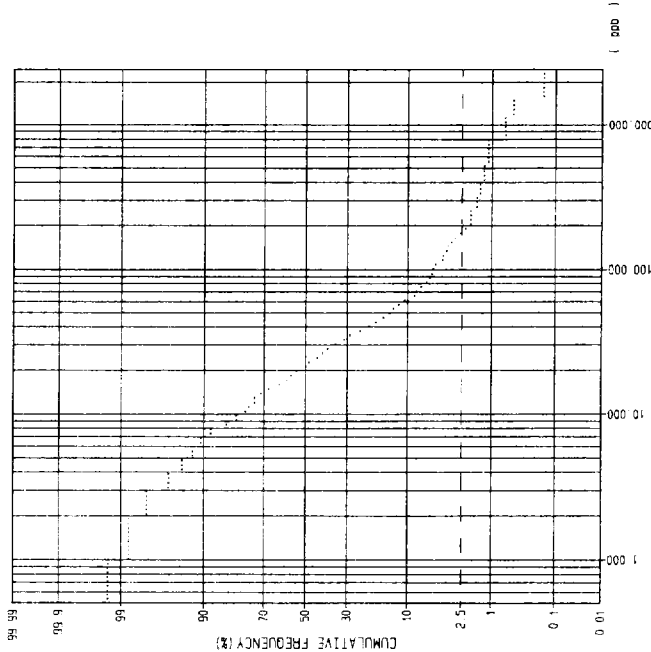
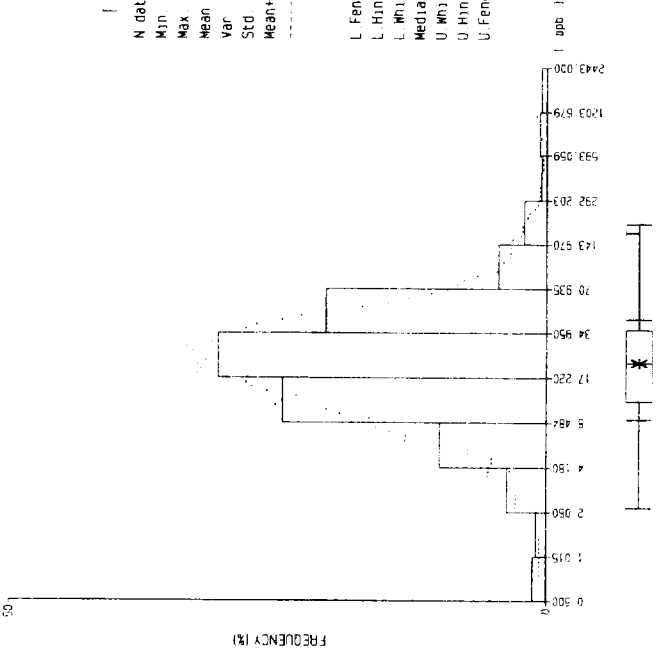
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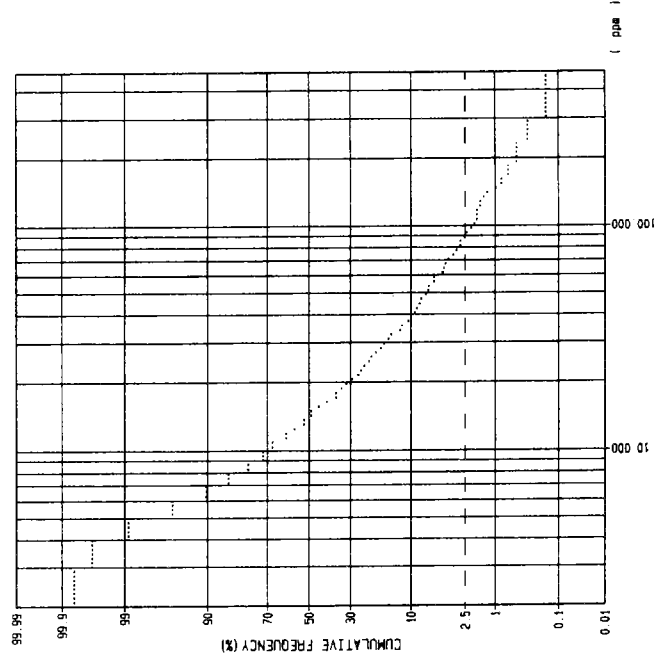
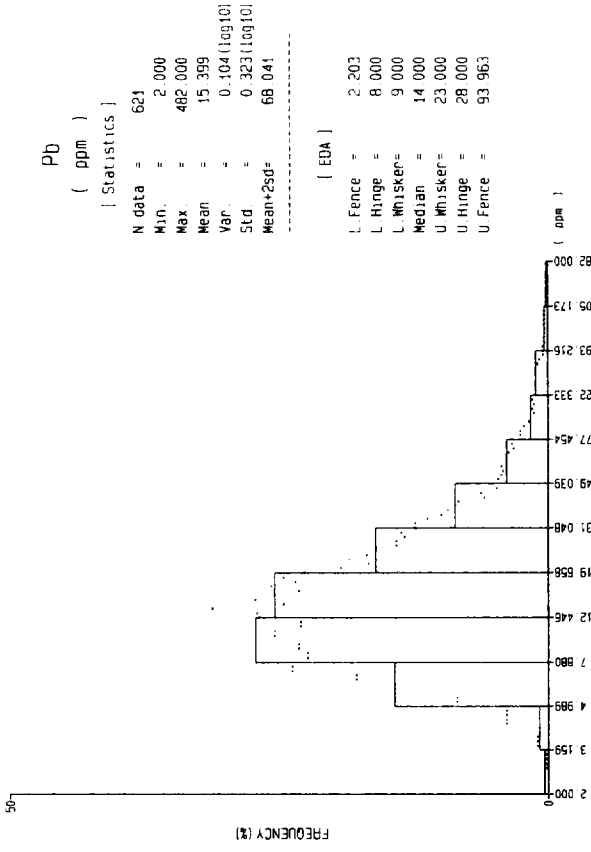
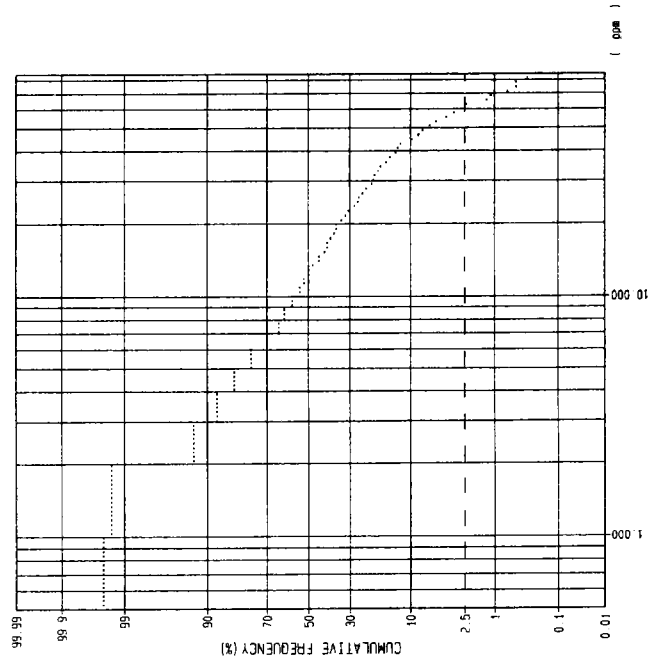
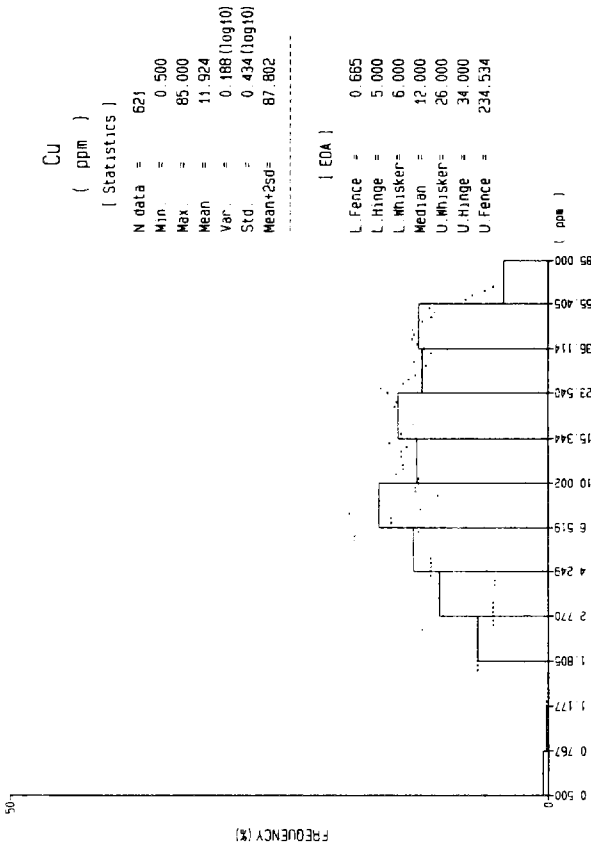
[Statistics]

N data = 621
 Min = 0.500
 Max = 2443.000
 Mean = 21.330
 Var = 0.209 (log10)
 Std = 0.457 (log10)
 Mean±2sd = 175.374

[EDA]

L Fence = 2.216
 L Hinge = 9.000
 L Whisker = 12.000
 Median = 22.000
 U Whisker = 37.000
 U Hinge = 44.000
 U Fence = 200.324





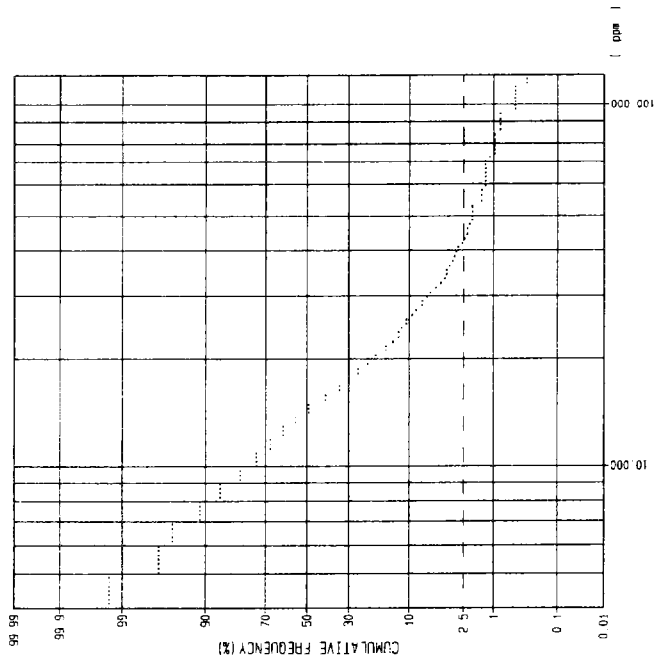
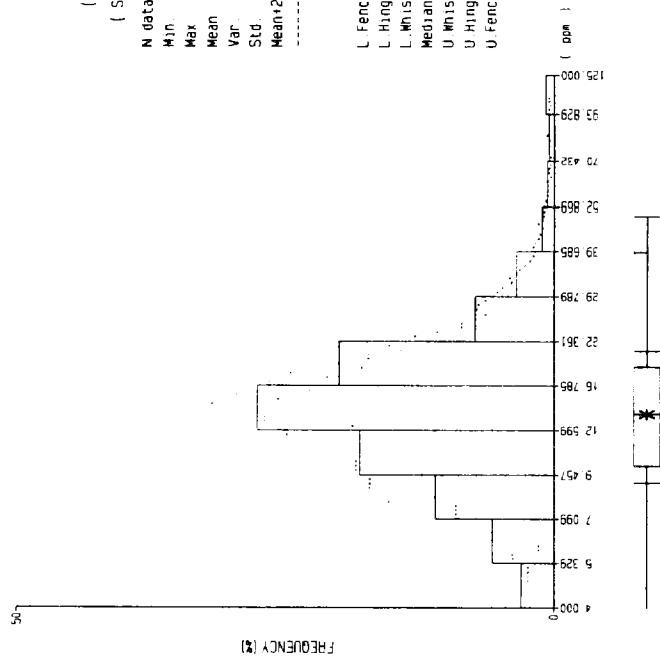
Zn
(ppm)

(Statistics)

N data = 621
 Min = 4 000
 Max = 125 000
 Mean = 14 278
 Var = 0 049 (log10)
 Std = 0 221 (log10)
 Mean+2sd = 39 438

(EDA)

L Fence = 3 818
 L Hinge = 9 000
 L Whisker = 10 000
 Median = 14 000
 U Whisker = 19 000
 U Hinge = 21 000
 U Fence = 49 760



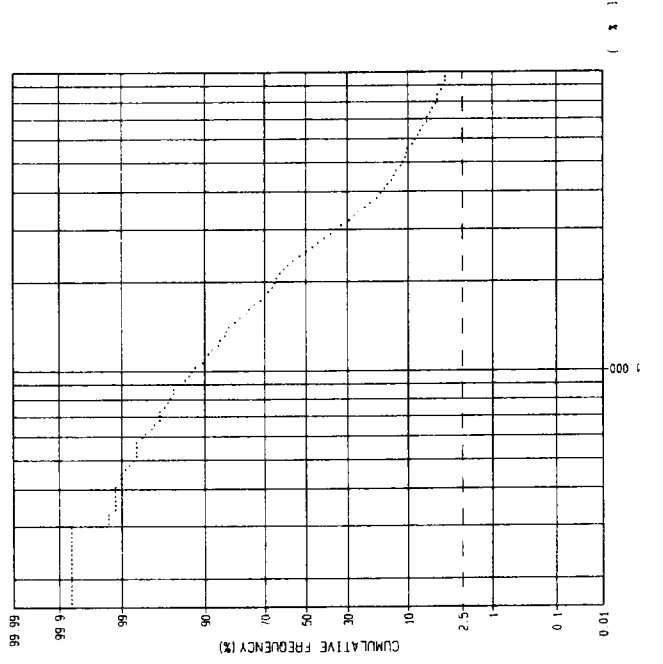
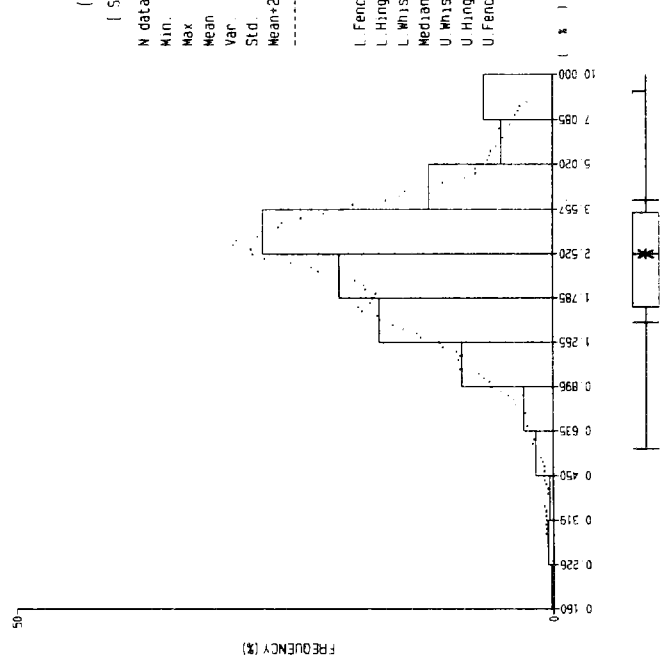
Fe
(%)

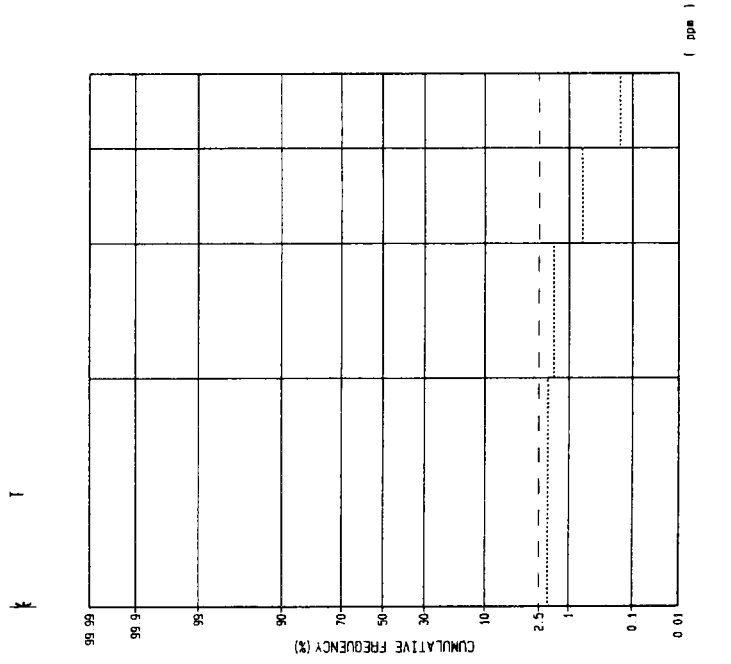
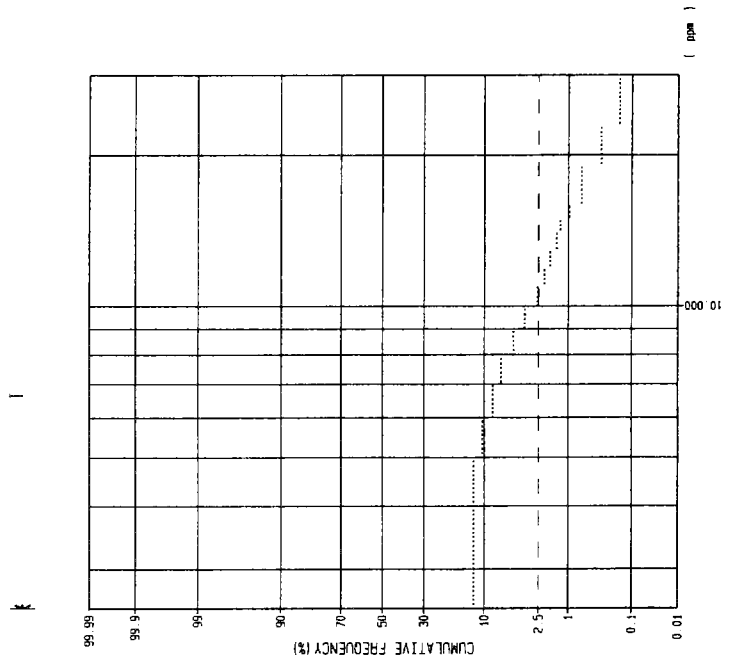
(Statistics)

N data = 621
 Min = 0 160
 Max = 10 000
 Mean = 2 433
 Var = 0 078 (log10)
 Std = 0 279 (log10)
 Mean+2sd = 8 785

(EDA)

L Fence = 0 552
 L Hinge = 1 470
 L Whisker = 1 660
 Median = 2 510
 U Whisker = 3 460
 U Hinge = 3 810
 U Fence = 10 412





Hg

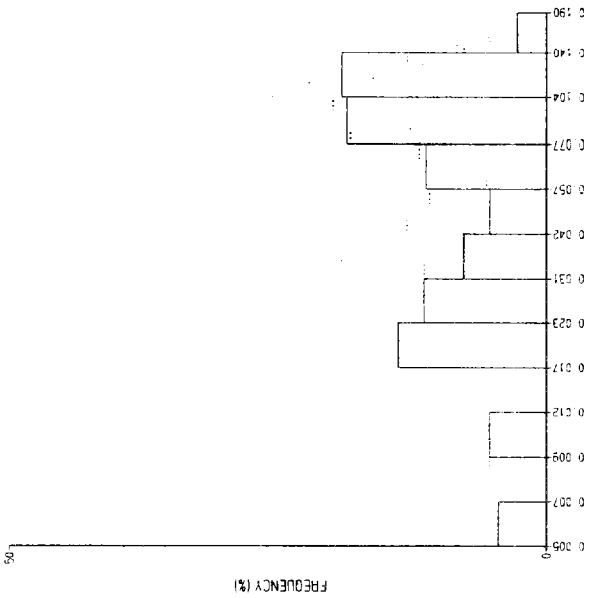
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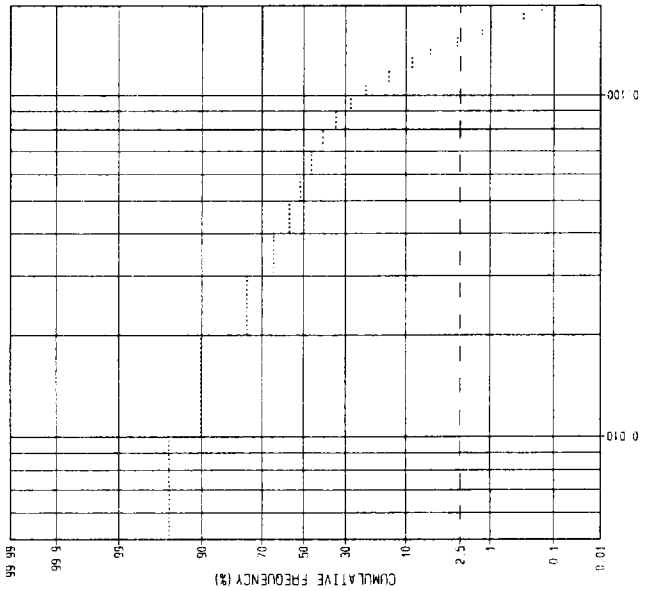
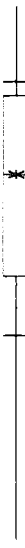
N data = 621
 Min = 0.005
 Max = 0.190
 Mean = 0.047
 Var = 0.148 (log10)
 Std. = 0.385 (log10)
 Mean+2sd = 0.278

[EDA]

L Fence = 0.005
 L Hinge = 0.020
 L Whisker = 0.030
 Median = 0.060
 U Whisker = 0.100
 U Hinge = 0.110
 U Fence = 0.609



(ppm)



(ppm)

B1

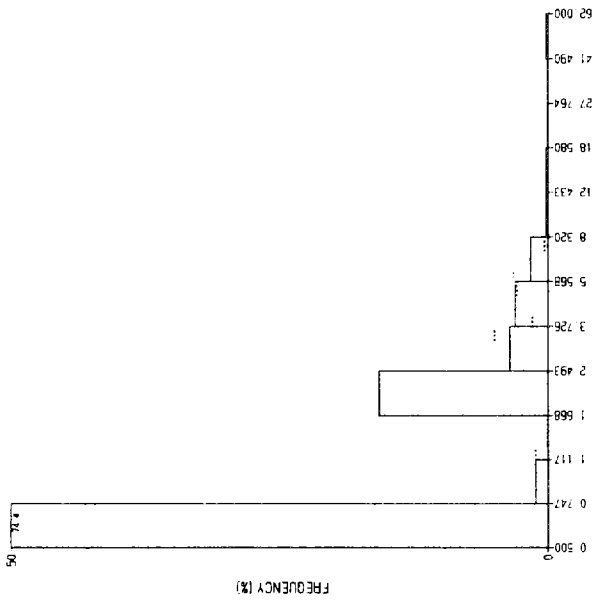
(ppm)

[Statistics]

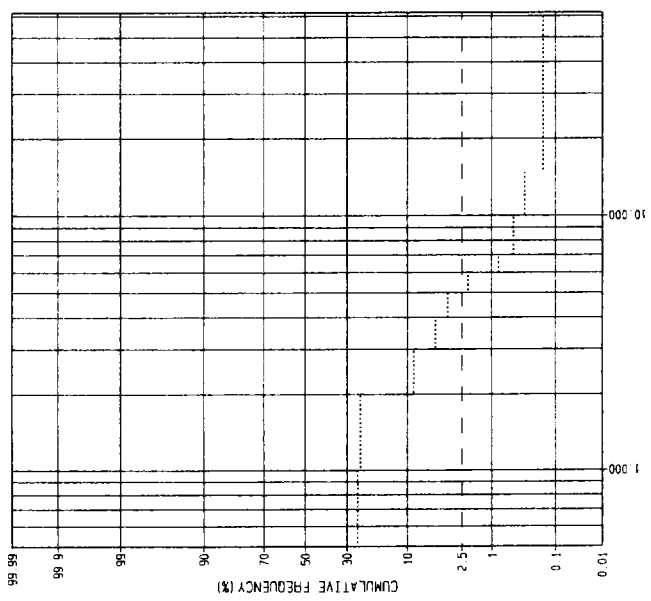
N data = 621
 Min = 0.500
 Max = 62.000
 Mean = 0.758
 Var = 0.108 (log10)
 Std. = 0.328 (log10)
 Mean+2sd = 3.435

[EDA]

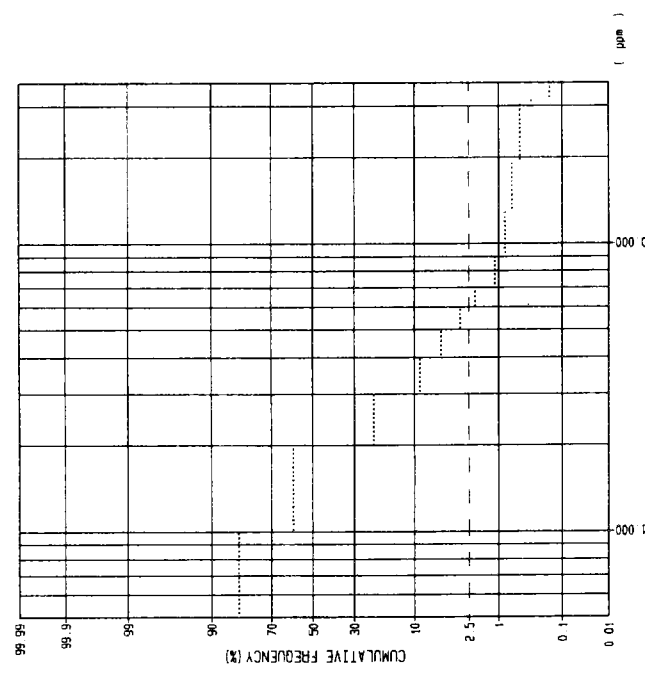
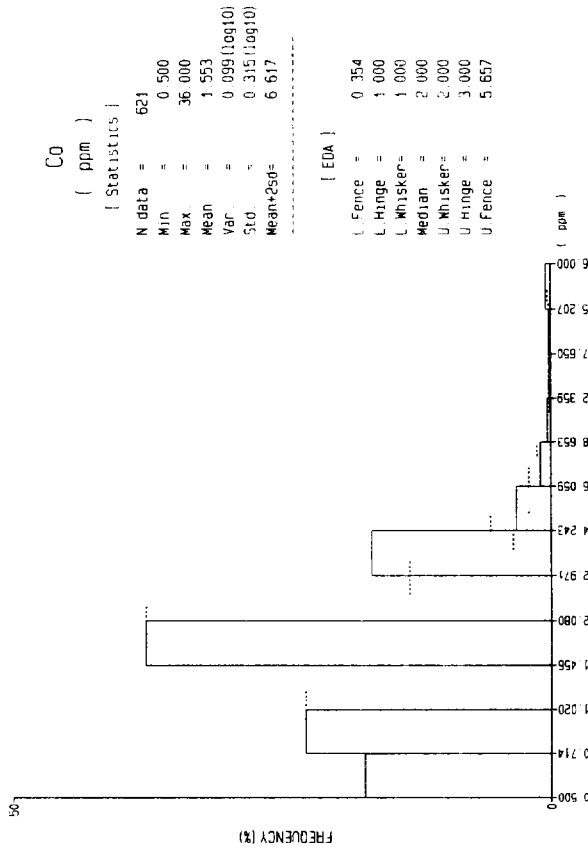
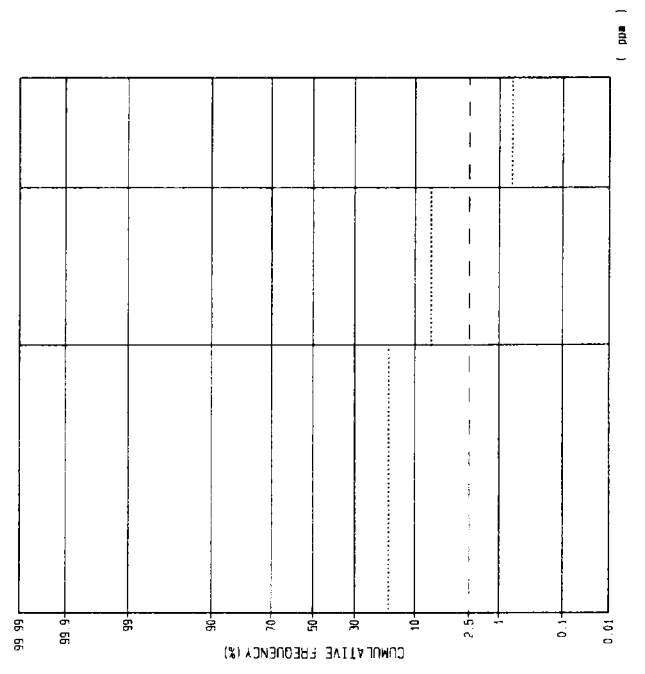
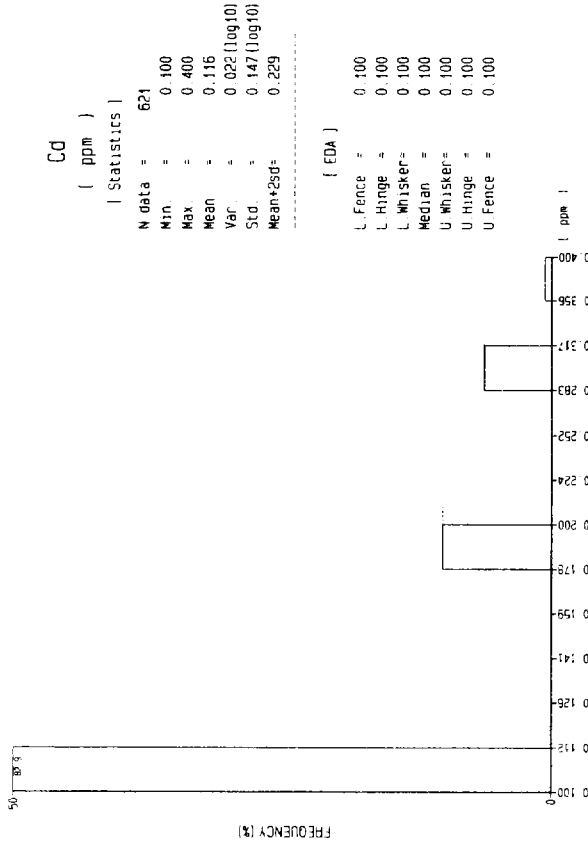
L Fence = 0.177
 L Hinge = 0.500
 L Whisker = 0.500
 Median = 0.500
 U Whisker = 1.000
 U Hinge = 2.000
 U Fence = 2.828



(ppm)

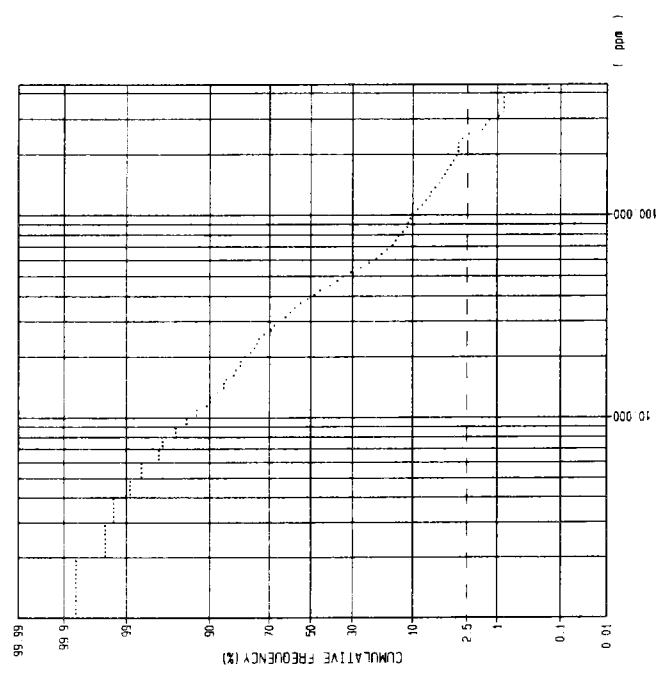
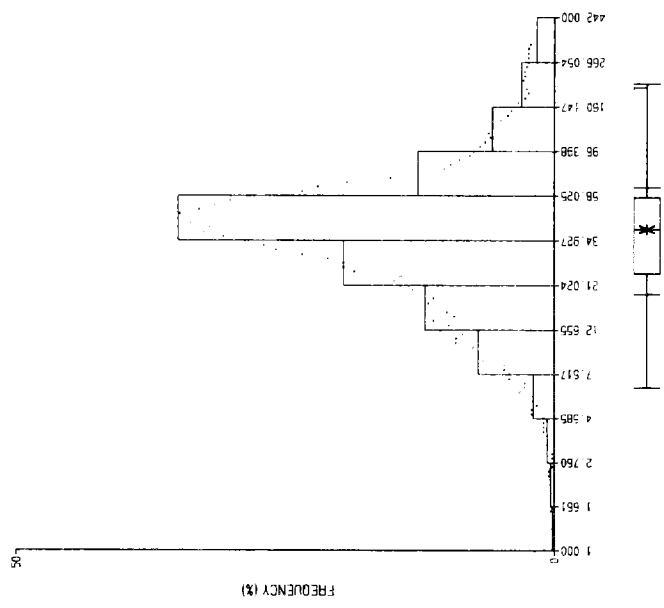


(ppm)



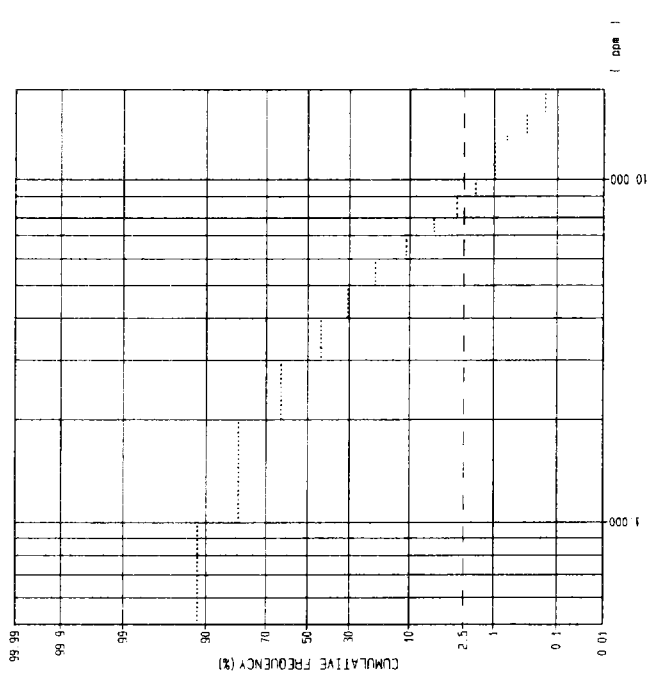
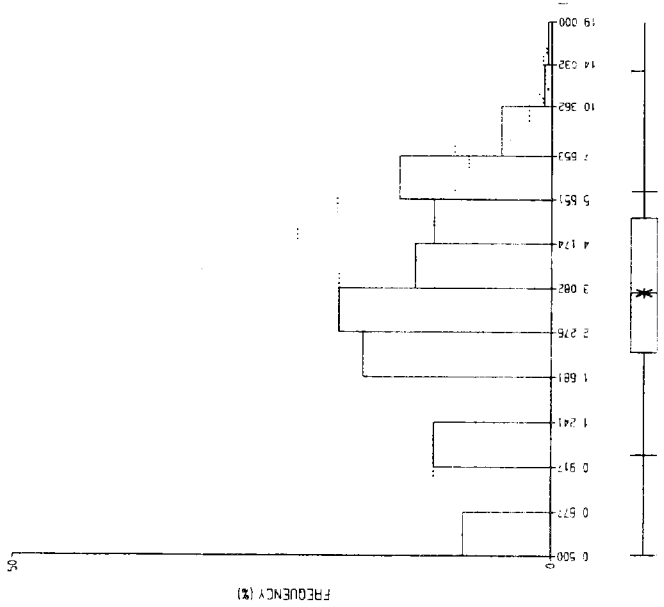
V
(ppm)
[Statistics]
N data = 621
Min = 1 000
Max = 442 000
Mean = 36 974
Var = 0 134 (log10)
Std = 0 366 (log10)
Mean+2sd= 199 541

[EDA]
L Fence = 6 557
L Hinge = 19 000
L Whisker = 24 000
Median = 40 000
U Whisker = 57 000
U Hinge = 64 000
U Fence = 208 627



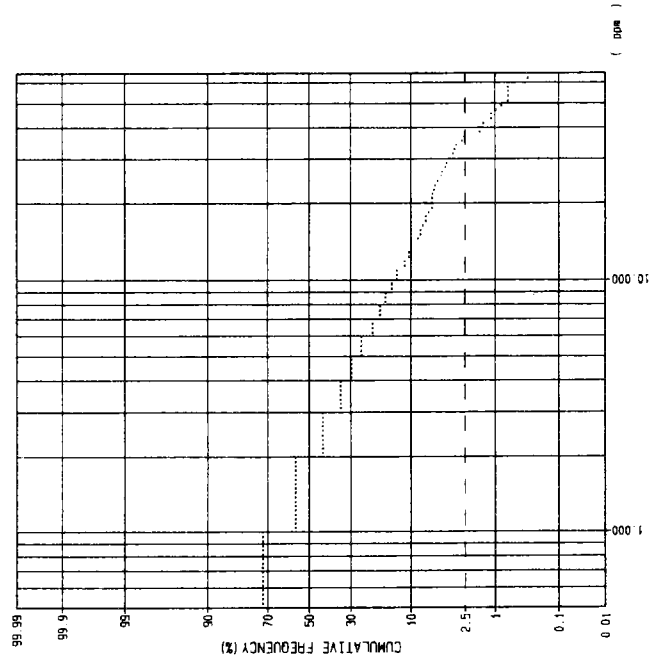
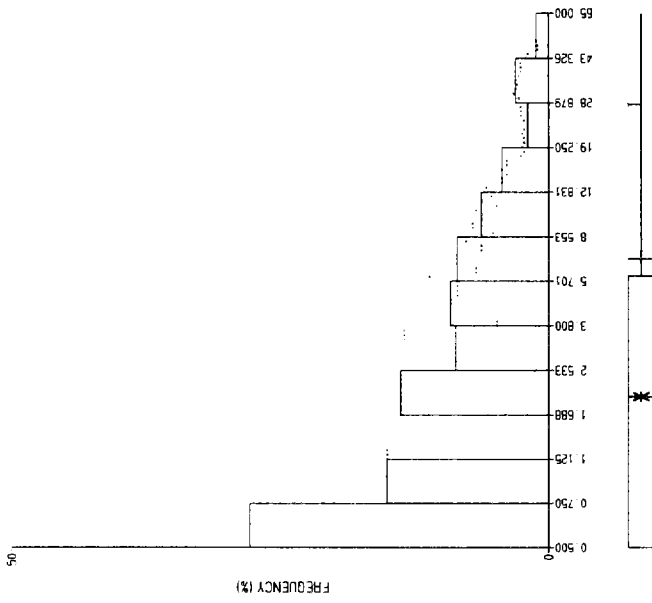
N1
(ppm)
[Statistics]
N data = 621
Min = 0 500
Max = 19 000
Mean = 2 782
Var = 0 116 (log10)
Std = 0 341 (log10)
Mean+2sd= 13 368

[EDA]
L Fence = 0 506
L Hinge = 1 000
L Whisker = 2 000
Median = 3 000
U Whisker = 5 000
U Hinge = 6 000
U Fence = 19 764



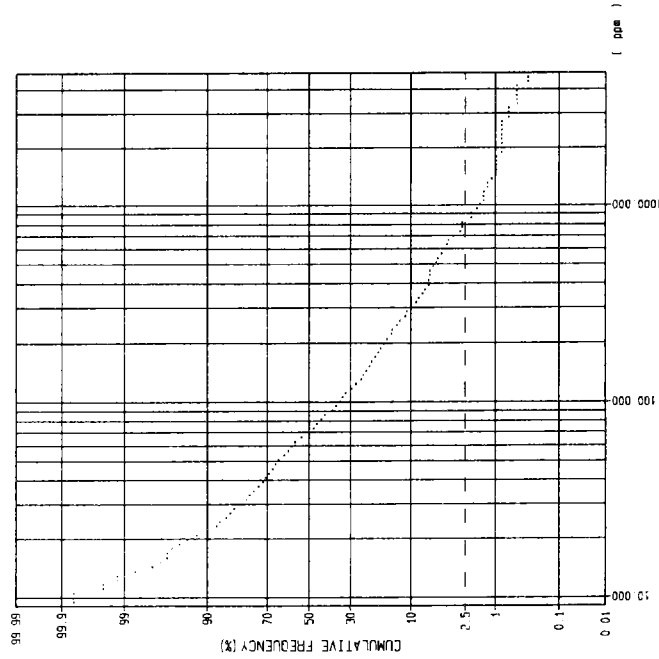
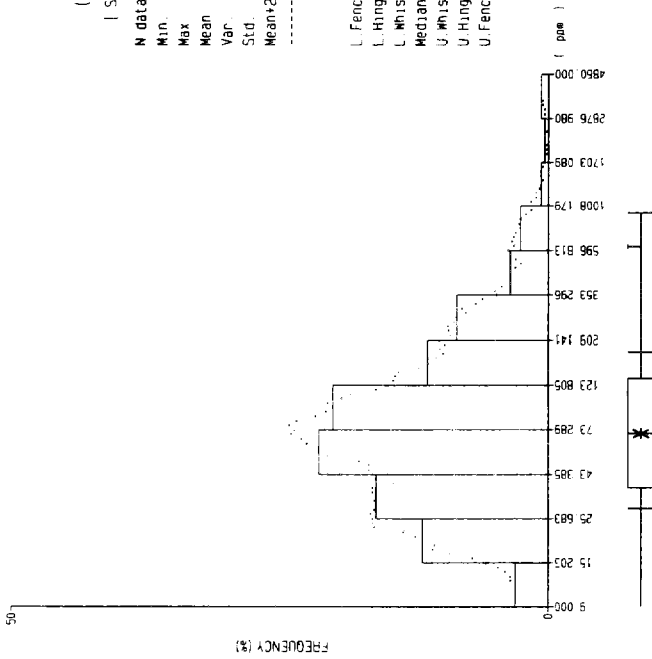
MO
(ppm)
[Statistics]
N data = 621
Min = 0.500
Max = 65.000
Mean = 2.179
Var = 0.312 (log10)
Std. = 0.558 (log10)
Mean+2Std = 28.498

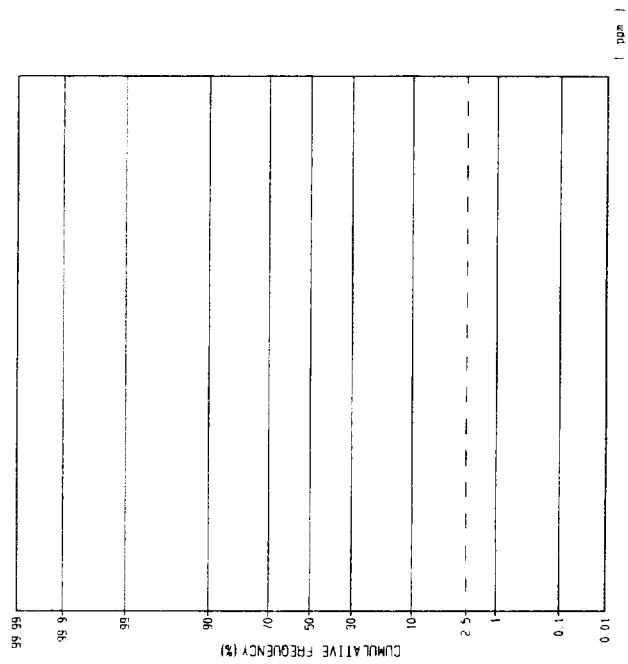
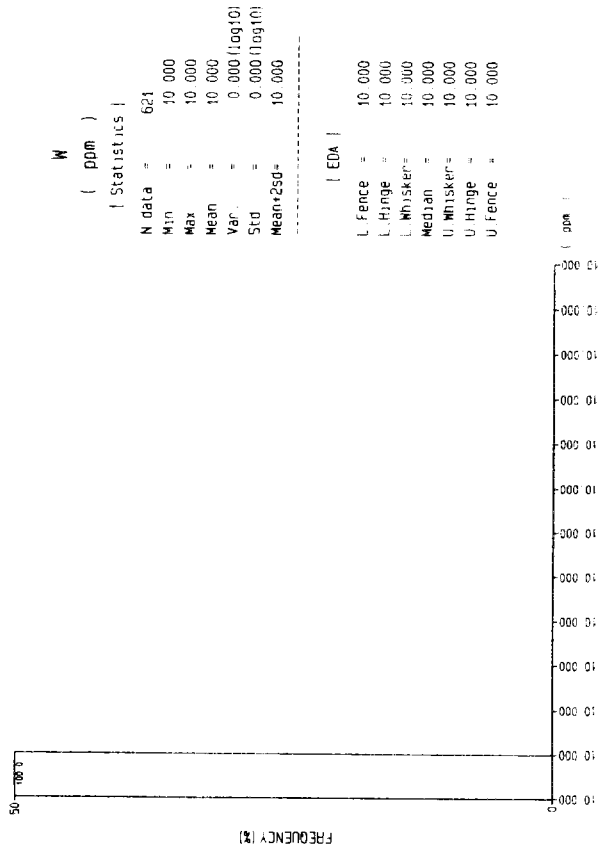
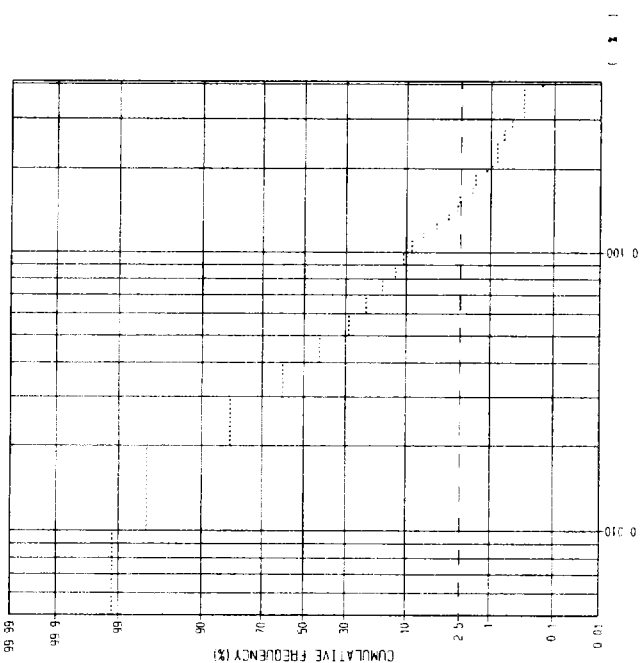
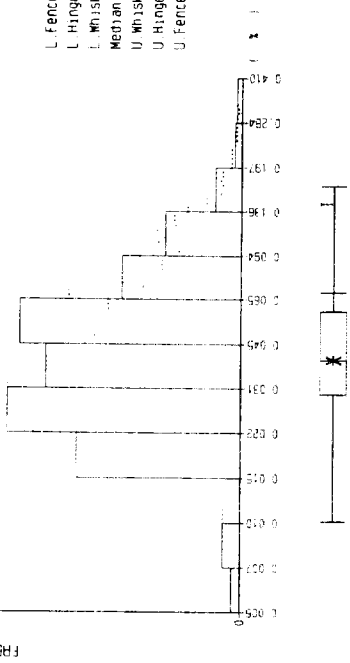
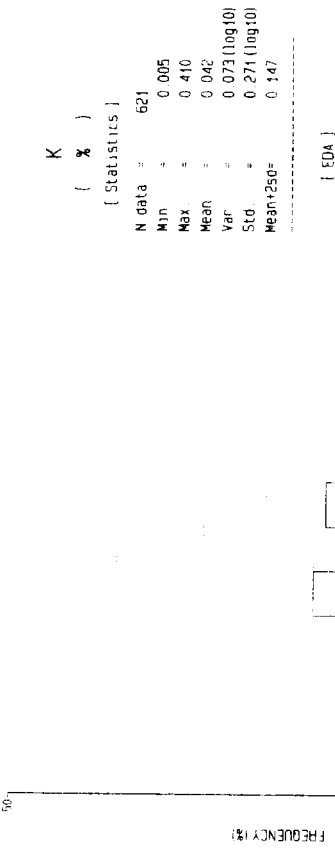
[EDA]
L.Fence = 0.012
L.Hinge = 0.500
L.Whisker = 2.000
Median = 6.000
U.Hinge = 7.000
U.Fence = 249.415



MO
(ppm)
[Statistics]
N data = 621
Min = 9.000
Max = 4860.000
Mean = 77.471
Var = 0.205 (log10)
Std. = 0.453 (log10)
Mean+2Std = 622.918

[EDA]
L.Fence = 5.368
L.Hinge = 29.000
L.Whisker = 37.000
Median = 70.000
U.Whisker = 134.000
U.Hinge = 182.000
U.Fence = 923.548





Appendix 22 List of soil geochemical samples in Block C

Sample List for Soil Geochemistry

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (cm)				Vegetation				
		X	Y						0	100	G.*1	S.*2		T.*3	H.*4		
1	C05 10 0000	540145	8946298	Alluvial deposits	Qa	B	100	B					R	C	F	D	Primary
2	10 0100	540145	8946398	Alluvial deposits	Qa	B	100	LG					R	C	F	D	Secondary
3	10 0200	540145	8946498	Bi-granite	Grillb	B	100	B					R	C	F	D	Secondary
4	10 0300	540145	8946598	Bi-granite	Grillb	B	100	GB					R	C	F	D	Secondary
5	10 0400	540145	8946698	Alluvial deposits	Qa	B	100	LG					R	C	F	D	Secondary
6	10 0500	540145	8946798	Alluvial deposits	Qa	B	100	LG					R	C	F	D	Secondary
7	10 0600	540145	8946898	Alluvial deposits	Qa	B	100	LG					R	C	F	D	Secondary
8	10 0700	540145	8946998	Alluvial deposits	Qa	B	100						R	S	S	D	Secondary
9	10 0800	540145	8947098	Alluvial deposits	Qa	B	100	Y					R	C	F	D	Primary
10	10 0900	540145	8947198	Acidic volcanic rocks	Puiv	B	100	Y					R	C	F	D	Primary
11	10 1000	540145	8947298	Acidic volcanic rocks	Puiv	B	100	Y					F	C	F	D	Primary
12	10 1100	540145	8947398	Acidic volcanic rocks	Puiv	B	100	YB					F	C	F	D	Primary
13	10 1200	540145	8947498	Acidic volcanic rocks	Puiv	B	100	Y					M	C	R	D	Primary
14	10 1300	540145	8947598	Acidic volcanic rocks	Puiv	B	100	YB					R	C	M	D	Primary
15	10 1400	540145	8947698	Acidic volcanic rocks	Puiv		100										
16	10 1500	540145	8947798	Acidic volcanic rocks	Puiv	B	100	Y					R	S	M	D	Primary
17	10 1600	540145	8947898	Acidic volcanic rocks	Puiv	B	100	Y					F	S	F	D	Primary
18	10 1700	540145	8947998	Acidic volcanic rocks	Puiv	B	100	Y					R	S	F	D	Primary
19	10 1800	540145	8948098	Bi-granite	Grillb	B	100	YB					R	C	S	D	Primary
20	10 1900	540145	8948198	Bi-granite	Grillb	B	100	R					M	C	F	D	Primary
21	10 2000	540145	8948298	Bi-granite	Grillb	B	100	R					M	C	F	D	Primary
22	10 2100	540145	8948398	Bi-granite	Grillb	B	100	RB					M	C	F	D	Primary
23	10 2200	540145	8948498	Bi-granite	Grillb	B	100	Y					M	C	F	D	Primary
24	10 2300	540145	8948598	Bi-granite	Grillb	B	100	YB					M	C	F	D	Primary
25	10 2400	540145	8948698	Bi-granite	Grillb	B	100	YB					R	C	F	D	Primary
26	10 2500	540145	8948798	Alluvial deposits	Qa	B	100	LB					F	S	M	D	Primary
27	10 2600	540145	8948898	Bi-granite	Grillb	B	100	YB					F	C	F	D	Primary
28	10 2700	540145	8948998	Bi-granite	Grillb	B	100	YB					M	C	F	D	Primary
29	10 2800	540145	8949098	Bi-granite	Grillb	B	100	YB					M	C	F	D	Primary
30	10 2900	540145	8949198	Bi-granite	Grillb	B	100	YB					F	S	M	D	Primary
31	10 3000	540145	8949298	Bi-granite	Grillb	B	100	YB					M	C	M	D	Primary
32	10 3100	540145	8949398	Bi-granite	Grillb	B	100	DR					M	C	F	D	Secondary
33	10 3200	540145	8949498	Bi-granite	Grillb	B	100	DR					M	S	F	D	Secondary
34	10 3300	540145	8949598	Bi-granite	Grillb	B	100	RB					M	C	F	D	Secondary
35	10 3400	540145	8949698	Bi-granite	Grillb	B	100	RB					M	C	F	D	Secondary
36	10 3500	540145	8949798	Bi-granite	Grillb	B	100	DR					R	C	F	D	Secondary
37	10 3600	540145	8949898	Bi-granite	Grillb	B	100	R					R	C	F	D	Secondary
38	10 3700	540145	8949998	Bi-granite	Grillb	B	100	YB					R	S	F	D	Secondary
39	10 3800	540145	8950098	Bi-granite	Grillb	B	100	YB					F	C	F	D	Secondary
40	10 3900	540145	8950198	Bi-granite	Grillb	B	100	YB					M	C	F	D	Secondary
41	10 4000	540145	8950298	Alluvial deposits	Qa	B	100	YB					F	C	F	D	Secondary
42	10 4100	540145	8950398	Bi-granite	Grillb	B	100	YB					M	C	F	D	Secondary
43	10 4200	540145	8950498	Bi-granite	Grillb	B	100	YB					M	C	F	D	Secondary
44	10 4300	540145	8950598	Bi-granite	Grillb	B	100	Y					M	C	F	D	Secondary
45	10 4400	540145	8950698	Bi-granite	Grillb	B	100	Y					F	C	F	D	Secondary
46	10 4500	540145	8950798	Bi-granite	Grillb	B	100	YB					M	C	F	D	Secondary
47	C05 20 0000	540345	8946298	Bi-granite	Grillb	B	100	LB					R	C	M	D	Primary
48	20 0100	540345	8946398	Bi-granite	Grillb	B	100	LB					R	C	M	D	Primary
49	20 0200	540345	8946498	Bi-granite	Grillb	B	100	LB					R	C	M	D	Primary
50	20 0300	540345	8946598	Alluvial deposits	Qa		100	G					R	C	F	D	Primary
51	20 0400	540345	8946698	Bi-granite	Grillb	B	100	LB					R	C	F	D	Primary
52	20 0500	540345	8946798	Bi-granite	Grillb	B	100	YB					R	C	F	D	Primary
53	20 0600	540345	8946898	Bi-granite	Grillb	B	100	YB					R	C	F	D	Primary
54	20 0700	540345	8946998	Acidic volcanic rocks	Puiv	B	100	YB					R	C	F	D	Primary
55	20 0800	540345	8947098	Acidic volcanic rocks	Puiv		100	Y									
56	20 0900	540345	8947198	Alluvial deposits	Qa	B	100	YB					R	C	F	D	Secondary
57	20 1000	540345	8947298	Acidic volcanic rocks	Puiv	B	100	YB					R	C	F	D	Secondary
58	20 1100	540345	8947398	Acidic volcanic rocks	Puiv	B	100	YB					R	C	F	D	Secondary
59	20 1200	540345	8947498	Acidic volcanic rocks	Puiv	B	100	YB					R	C	F	D	Secondary
60	20 1300	540345	8947598	Acidic volcanic rocks	Puiv	B	100	YB					R	C	F	D	Secondary

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

B:brown, G:grey, R:red, Y:yellow, W:white, L:light, D:dark gray □ A layer ▣ A/B layer ■ B layer ▤ C layer

Sample List for Soil Geochemistry

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
		X	Y						0	100					
61	C05 20 1400	540345	8947698	Acidic volcanic rocks	Puiv	B	100	YB			R	C	F	D	Primary
62	20 1500	540345	8947798	Bi-granite	Grillb	B	100	YB			F	S	F	D	Primary
63	20 1600	540345	8947898	Aplite	Ap	B	100	RB			F	S	M	D	Primary
64	20 1700	540345	8947998	Aplite	Ap	B	100	RB			R	C	S	D	Primary
65	20 1800	540345	8948098	Bi-granite	Grillb	B	100	RB			R	C	M	D	Primary
66	20 1900	540345	8948198	Bi-granite	Grillb	B	100	RB			R	C	M	D	Primary
67	20 2000	540345	8948298	Bi-granite	Grillb	B	100	RB			F	C	F	D	Primary
68	20 2100	540345	8948398	Bi-granite	Grillb	B	100	RB			F	C	F	D	Primary
69	20 2200	540345	8948498	Bi-granite	Grillb	B	100	YB			R	S	M	D	Primary
70	20 2300	540345	8948598	Bi-granite	Grillb	B	100	YB			R	S	S	D	Primary
71	20 2400	540345	8948698	Bi-granite	Grillb	B	100	YB			R	S	S	D	Primary
72	20 2500	540345	8948798	Bi-granite	Grillb	B	100	RB			R	C	F	D	Primary
73	20 2600	540345	8948898	Bi-granite	Grillb	B	100	R			R	C	F	D	Primary
74	20 2700	540345	8948998	Bi-granite	Grillb	B	100	R			R	C	F	D	Primary
75	20 2800	540345	8949098	Bi-granite	Grillb	B	100	R			R	C	F	D	Primary
76	20 2900	540345	8949198	Bi-granite	Grillb	B	100	R			R	C	F	D	Primary
77	20 3000	540345	8949298	Bi-granite	Grillb	B	100	RB			F	C	F	D	Secondary
78	20 3100	540345	8949398	Bi-granite	Grillb	B	100	YB			R	S	F	D	Secondary
79	20 3200	540345	8949498	Alluvial deposits	Qa	Sand	100	YB			R	S	M	D	Secondary
80	20 3300	540345	8949598	Bi-granite	Grillb	B	100	YB			R	S	F	D	Secondary
81	20 3400	540345	8949698	Alluvial deposits	Qa	Sand	100	YB			R	S	F	D	Secondary
82	20 3500	540345	8949798	Bi-granite	Grillb	B	100	YB			F	S	F	D	Secondary
83	20 3600	540345	8949898	Bi-granite	Grillb	B	100	YB			F	S	M	D	Secondary
84	20 3700	540345	8949998	Bi-granite	Grillb	B	100	RB			R	C	F	D	Secondary
85	20 3800	540345	8950098	Bi-granite	Grillb	B	100	RB			M	C	F	D	Secondary
86	20 3900	540345	8950198	Bi-granite	Grillb	B	100	YB			F	C	F	D	Secondary
87	20 4000	540345	8950298	Bi-granite	Grillb	B	100	RB			F	C	F	D	Secondary
88	20 4100	540345	8950398	Bi-granite	Grillb	B	100	RB			F	C	M	D	Secondary
89	20 4200	540345	8950498	Aplite	Ap	B	100	RB			F	S	S	D	Secondary
90	20 4300	540345	8950598	Bi-granite	Grillb	B	100	YB			R	S	M	D	Secondary
91	20 4400	540345	8950698	Bi-granite	Grillb	B	100	YB			R	S	M	D	Secondary
92	20 4500	540345	8950798	Bi-granite	Grillb	Sand	100	G			R	S	M	W	Secondary
93	C05 30 0000	540545	8946298	Bi-granite	Grillb	B	100	LB			R	C	F	D	Primary
94	30 0100	540545	8946398	Bi-granite	Grillb	B	100	LB			R	C	F	D	Primary
95	30 0200	540545	8946498	Bi-granite	Grillb	B	100	LB			R	C	M	D	Primary
96	30 0300	540545	8946598	Bi-granite	Grillb	B	100	LB			R	C	M	D	Primary
97	30 0400	540545	8946698	Acidic volcanic rocks	Puiv	B	100	LB			R	C	M	D	Primary
98	30 0500	540545	8946798	Acidic volcanic rocks	Puiv	B	100	LB			R	C	M	D	Primary
99	30 0600	540545	8946898	Acidic volcanic rocks	Puiv	B	100	YB			R	C	M	D	Primary
100	30 0700	540545	8946998	Acidic volcanic rocks	Puiv	B	100	YB			R	C	F	D	Secondary
101	30 0800	540545	8947098	Acidic volcanic rocks	Puiv	B	100	YB			R	C	F	D	Secondary
102	30 0900	540545	8947198	Acidic volcanic rocks	Puiv	B	100	Y			R	S	M	W	
103	30 1000	540545	8947298	Alluvial deposits	Qa	AB	100	GW			R	C	F	W	
104	30 1100	540545	8947398	Alluvial deposits	Qa	B	100	GY			R	S	M	D	
105	30 1200	540545	8947498	Bi-granite	Grillb	B	100	Y			F	S	S	D	
106	30 1300	540545	8947598	Bi-granite	Grillb	B	100	YR			F	S	S	D	
107	30 1400	540545	8947698	Bi-granite	Grillb	B	100	Y			F	S	S	D	
108	30 1500	540545	8947798	Bi-granite	Grillb	B	100	YR			R	S	M	D	
109	30 1600	540545	8947898	Bi-granite	Grillb	B	100	GR			R	S	M	D	
110	30 1700	540545	8947998	Bi-granite	Grillb	B	100	RG			R	S	F	D	
111	30 1800	540545	8948098	Bi-granite	Grillb	B	100	GR			R	S	F	D	
112	30 1900	540545	8948198	Bi-granite	Grillb	B	100	GR			F	S	M	D	
113	30 2000	540545	8948298	Bi-granite	Grillb	B	100	G			F	S	M	D	
114	30 2100	540545	8948398	Bi-granite	Grillb	B	100	GW			R	S	M	D	
115	30 2200	540545	8948498	Bi-granite	Grillb	B	100	R			R	S	M	D	
116	30 2300	540545	8948598	Bi-granite	Grillb	B	100	YB			R	C	F	D	Primary
117	30 2400	540545	8948698	Bi-granite	Grillb	B	100	RB			F	C	M	D	Primary
118	30 2500	540545	8948798	Bi-granite	Grillb	B	100	RB			R	C	F	D	Primary
119	30 2600	540545	8948898	Bi-granite	Grillb	B	100	RB			R	C	F	D	Primary
120	30 2700	540545	8948998	Bi-granite	Grillb	B	100	RB			R	C	F	D	Primary

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

B: brown, G: gley, R: red, Y: yellow, W: white, L: light, D: dark gray □ A layer ▨ A/B layer ■ B layer ▩ C layer

Sample List for Soil Geochemistry

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
		X	Y											
121	C05 30 2800	540545	8949098	Bi-granite	Grillb	B	100	RB		R	C	F	D	Primary
122	30 2900	540545	8949198	Bi-granite	Grillb	B	100	RB		R	C	F	D	Primary
123	30 3000	540545	8949298	Bi-granite	Grillb	B	100	RB		R	C	F	D	Primary
124	30 3100	540545	8949398	Bi-granite	Grillb	AB	100	RB		F	C	M	D	Primary
125	30 3200	540545	8949498	Bi-granite	Grillb	B	100	YB		F	C	M	D	Primary
126	30 3300	540545	8949598	Bi-granite	Grillb	B	100	YB		M	C	M	D	Primary
127	30 3400	540545	8949698	Bi-granite	Grillb	AB	100	YB		M	C	M	D	Primary
128	30 3500	540545	8949798	Bi-granite	Grillb	B	100	RB		R	C	S	D	Primary
129	30 3600	540545	8949898	Bi-granite	Grillb	B	100	LB		F	C	M	D	Primary
130	30 3700	540545	8949998	Bi-granite	Grillb	B	100	LB		F	C	M	D	Primary
131	30 3800	540545	8950098	Bi-granite	Grillb	B	100	YB		F	C	F	D	Primary
132	30 3900	540545	8950198	Bi-granite	Grillb	B	100	RB		R	C	F	D	Secondary
133	30 4000	540545	8950298	Bi-granite	Grillb	B	100	LB		R	C	F	D	Secondary
134	30 4100	540545	8950398	Bi-granite	Grillb	B	100	RB		R	C	F	D	Secondary
135	30 4200	540545	8950498	Bi-granite	Grillb	B	100	RB		R	C	F	D	Secondary
136	30 4300	540545	8950598	Bi-granite	Grillb	B	100	YB		R	C	M	D	Secondary
137	30 4400	540545	8950698	Bi-granite	Grillb	Sand	100	LB		R	S	M	D	Primary
138	30 4500	540545	8950798	Bi-granite	Grillb	B	100	YB		F	C	M	D	Secondary
139	C05 40 0000	540745	8946298	Alluvial deposits	Qa	AB	100	G		R	S	F	D	Glass
140	40 0100	540745	8946398	Alluvial deposits	Qa	AB	100	LB		R	S	M	D	Secondary
141	40 0200	540745	8946498	Acidic volcanic rock	Puiv	B	100	YB		R	S	M	D	Secondary
142	40 0300	540745	8946598	Acidic volcanic rock	Puiv	B	100	YB		F	C	F	D	Secondary
143	40 0400	540745	8946698	Acidic volcanic rock	Puiv	B	100	LB		R	S	F	D	Secondary
144	40 0500	540745	8946798	Acidic volcanic rock	Puiv	B	100	LB		R	S	F	D	Secondary
145	40 0600	540745	8946898	Acidic volcanic rock	Puiv	B	100	B		R	C	F	D	Secondary
146	40 0700	540745	8946998	Acidic volcanic rock	Puiv	B	100	DB		M	C	M	D	Secondary
147	40 0800	540745	8947098	Acidic volcanic rock	Puiv	B	100	B		R	C	F	D	Secondary
148	40 0900	540745	8947198	Bi-granite	Grillb	B	100	LB		R	C	M	D	Secondary
149	40 1000	540745	8947298	Bi-granite	Grillb	B	100	LB		R	C	M	D	Secondary
150	40 1100	540745	8947398	Alluvial deposits	Qa	Sand	100	G		F	S	F	W	Secondary
151	40 1200	540745	8947498	Bi-granite	Grillb	B	100	B		F	C	F	D	Secondary
152	40 1300	540745	8947598	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
153	40 1400	540745	8947698	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
154	40 1500	540745	8947798	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
155	40 1600	540745	8947898	Bi-granite	Grillb	B	100	RB		R	C	M	D	Secondary
156	40 1700	540745	8947998	Bi-granite	Grillb	B	100	DB		R	C	F	D	Secondary
157	40 1800	540745	8948098	Bi-granite	Grillb	B	100	B		F	C	M	D	Secondary
158	40 1900	540745	8948198	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
159	40 2000	540745	8948298	Bi-granite	Grillb	B	100	LB		F	C	F	D	Secondary
160	40 2100	540745	8948398	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
161	40 2200	540745	8948498	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
162	40 2300	540745	8948598	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
163	40 2400	540745	8948698	Bi-granite	Grillb	B	100	B		R	C	F	M	Secondary
164	40 2500	540745	8948798	Bi-granite	Grillb	B	100	B		F	C	F	D	Secondary
165	40 2600	540745	8948898	Bi-granite	Grillb	B	100	RB		R	C	F	D	Secondary
166	40 2700	540745	8948998	Bi-granite	Grillb	B	100	RB		R	C	F	D	Secondary
167	40 2800	540745	8949098	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
168	40 2900	540745	8949198	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
169	40 3000	540745	8949298	Bi-granite	Grillb	B	100	B		R	C	F	D	Secondary
170	40 3100	540745	8949398	Bi-granite	Grillb	B	100	B		R	C	F	D	Glass
171	40 3200	540745	8949498	Bi-granite	Grillb	B	100	B		R	C	S	D	Glass
172	40 3300	540745	8949598	Alluvial deposits	Qa	Sand	100	BG		F	S	S	D	Glass
173	40 3400	540745	8949698	Alluvial deposits	Qa	B	100	B		R	C	M	D	Secondary
174	40 3500	540745	8949798	Bi-granite	Grillb	B	100	B		F	C	M	D	Secondary
175	40 3600	540745	8949898	Bi-granite	Grillb	B	100	B		F	C	M	D	Secondary
176	40 3700	540745	8949998	Aplite	Ap	B	100	B		F	C	F	D	Secondary
177	40 3800	540745	8950098	Bi-granite	Grillb	B	100	B		F	C	F	D	Secondary
178	40 3900	540745	8950198	Bi-granite	Grillb	B	100	YB		F	C	F	D	Secondary
179	40 4000	540745	8950298	Bi-granite	Grillb	AB	100	YB		F	S	M	D	Secondary
180	40 4100	540745	8950398	Bi-granite	Grillb	B	100	YB		R	C	F	D	Secondary

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

B:brown, G:gley, R:red, Y:yellow, W:white, L:light, D:dark gray □ A layer ▣ A/B layer ■ B layer ▤ C layer

Sample List for Soil Geochemistry

Ser. No.	Sample No.	Coordinates		Rock Name	Geolo. Unit	Horizon of Soil	Depth (cm)	Color	Soil Profile (cm)				Vegetation					
		X	Y						0	100	G. *1	S. *2		T. *3	H. *4			
181	C05 40 4200	540745	8950498	Bi-granite	Grillb	B	100	B					R	C	F	D	Secondary	
182	40 4300	540745	8950598	Bi-granite	Grillb	B	100	B						F	C	F	D	Secondary
183	40 4400	540745	8950698	Alluvial deposits	Qa	Sand	100	YG						F	S	F	W	Glass
184	40 4500	540745	8950798	Bi-granite	Grillb	B	100	LB						F	C	M	D	Secondary
185	C05 50 0000	540945	8946298	Acidic volcanic rocks	Puiv	B	100	RB						M	S	M	D	Secondary
186	50 0100	540945	8946398	Acidic volcanic rocks	Puiv	B	100	LB						R	S	M	D	Glass
187	50 0200	540945	8946498	Alluvial deposits	Qa	AB	100	G						F	S	M	W	Glass
188	50 0300	540945	8946598	Alluvial deposits	Qa	B	100	YB						R	C	M	D	Glass
189	50 0400	540945	8946698	Acidic volcanic rocks	Puiv	B	100	YB						R	C	F	D	Secondary
190	50 0500	540945	8946798	Acidic volcanic rocks	Puiv	B	100	RB						R	C	F	D	Secondary
191	50 0600	540945	8946898	Acidic volcanic rocks	Puiv	B	100	LB						R	S	F	D	Secondary
192	50 0700	540945	8946998	Bi-granite	Grillb	B	100	LB						R	C	M	D	Secondary
193	50 0800	540945	8947098	Bi-granite	Grillb	B	100	LB						R	S	M	D	Secondary
194	50 0900	540945	8947198	Bi-granite	Grillb	AB	100	LB						F	S	M	D	Secondary
195	50 1000	540945	8947298	Bi-granite	Grillb	B	100	LB						R	S	M	D	Secondary
196	50 1100	540945	8947398	Bi-granite	Grillb	B	100	RB						R	C	F	D	Secondary
197	50 1200	540945	8947498	Alluvial deposits	Qa	B	100	LB						R	S	M	D	Secondary
198	50 1300	540945	8947598	Alluvial deposits	Qa	AB	100	LB						F	S	M	D	Secondary
199	50 1400	540945	8947698	Alluvial deposits	Qa	AB	100	LB						F	S	M	D	Secondary
200	50 1500	540945	8947798	Bi-granite	Grillb	B	100	RB						F	C	S	D	Secondary
201	50 1600	540945	8947898	Bi-granite	Grillb	B	100	RB						F	S	M	D	Secondary
202	50 1700	540945	8947998	Bi-granite	Grillb	B	100	RB						F	C	F	D	Secondary
203	50 1800	540945	8948098	Bi-granite	Grillb	B	100	RB						F	C	F	D	Secondary
204	50 1900	540945	8948198	Bi-granite	Grillb	B	100	RB						R	C	F	D	Secondary
205	50 2000	540945	8948298	Bi-granite	Grillb	B	100	RB						R	C	F	D	Secondary
206	50 2100	540945	8948398	Bi-granite	Grillb	B	100	RB						R	C	F	D	Secondary
207	50 2200	540945	8948498	Bi-granite	Grillb	B	100	RB						R	C	F	D	Secondary
208	50 2300	540945	8948598	Bi-granite	Grillb	B	100	LB						M	S	M	D	Secondary
209	50 2400	540945	8948698	Bi-granite	Grillb	B	100	LB						F	S	S	D	Secondary
210	50 2500	540945	8948798	Bi-granite	Grillb	B	100	B						M	C	M	D	Primary
211	50 2600	540945	8948898	Bi-granite	Grillb	B	100	RB						R	C	F	D	Primary
212	50 2700	540945	8948998	Bi-granite	Grillb	B	100	RB						M	C	F	D	Primary
213	50 2800	540945	8949098	Bi-granite	Grillb	B	100	RB						M	C	F	D	Primary
214	50 2900	540945	8949198	Bi-granite	Grillb	B	100	R						R	C	F	D	Primary
215	50 3000	540945	8949298	Bi-granite	Grillb	B	100	RB						M	C	F	D	Primary
216	50 3100	540945	8949398	Bi-granite	Grillb	B	100	RB						M	S	F	D	Secondary
217	50 3200	540945	8949498	Bi-granite	Grillb	B	100	YR						F	S	M	D	Secondary
218	50 3300	540945	8949598	Alluvial deposits	Qa	Sand	100	LB						M	S	F	D	Secondary
219	50 3400	540945	8949698	Alluvial deposits	Qa	B	100	YR						M	C	M	D	Primary
220	50 3500	540945	8949798	Bi-granite	Grillb	B	100	DR						M	C	M	D	Primary
221	50 3600	540945	8949898	Bi-granite	Grillb	B	100	DR						M	C	M	D	Primary
222	50 3700	540945	8949998	Bi-granite	Grillb	B	100	R						R	C	F	D	Primary
223	50 3800	540945	8950098	Bi-granite	Grillb	B	100	YB						R	S	F	D	Primary
224	50 3900	540945	8950198	Bi-granite	Grillb	B	100	YB						M	S	F	D	Primary
225	50 4000	540945	8950298	Bi-granite	Grillb	B	100	YB						F	C	F	D	Primary
226	50 4100	540945	8950398	Bi-granite	Grillb	B	100	YB						F	C	F	D	Primary
227	50 4200	540945	8950498	Bi-granite	Grillb	B	100	YB						F	S	F	D	Secondary
228	50 4300	540945	8950598	Bi-granite	Grillb	B	100	RB						M	S	F	D	Secondary
229	50 4400	540945	8950698	Alluvial deposits	Qa	B	100	RB						M	S	F	D	Secondary
230	50 4500	540945	8950798	Bi-granite	Grillb	B	100	YB						R	C	M	D	Primary
231	C06 10 0000	541345	8946298	Bi-granite	Grillb	B	100	B						R	C	F	D	Secondary
232	10 0100	541345	8946398	Alluvial deposits	Qa	B	100	YB						R	C	F	D	Secondary
233	10 0200	541345	8946498	Alluvial deposits	Qa	B	100	B						R	C	F	D	Secondary
234	10 0300	541345	8946598	Alluvial deposits	Qa	B	100	B						R	S	F	D	Secondary
235	10 0400	541345	8946698	Alluvial deposits	Qa	B	100	YB						R	S	F	D	Secondary
236	10 0500	541345	8946798	Bi-granite	Grillb	B	100	YB						R	C	F	D	Glass
237	10 0600	541345	8946898	Terrace deposits	Qt	B	100	B						R	C	F	D	Glass
238	10 0700	541345	8946998	Terrace deposits	Qt	B	100	B						M	C	F	D	Glass
239	10 0800	541345	8947098	Terrace deposits	Qt	B	100	B						M	C	F	D	Glass
240	10 0900	541345	8947198	Aplite	Ap	B	100	LB						M	S	F	D	Secondary

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

B: brown, G: gley, R: red, Y: yellow, W: white, L: light, D: dark gray □ A layer ▨ A/B layer ■ B layer ▩ C layer