

Appendix 38 Statistical data of soil geochemical survey, histogram, EDA and cumulative frequency of each elements in Block G

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

File:area_g_reg.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 : 888 (1047)

===== Base Statistics =====

Elements	Mean	Var.	S.D.	Min	Max	Mean+2SD
Au	4.107	0.283*	0.532*	0.500	321.000	47.570 (LOG)
Ag	0.114	0.031*	0.176*	0.100	1.200	0.257 (LOG)
Cu	14.627	0.093*	0.305*	1.000	193.000	59.538 (LOG)
Pb	38.944	0.016*	0.125*	8.000	177.000	69.201 (LOG)
Zn	27.214	0.036*	0.191*	7.000	151.000	65.596 (LOG)
Fe	4.269	0.061*	0.247*	0.420	18.680	13.293 (LOG)
As	3.853	0.234*	0.483*	1.000	46.000	35.688 (LOG)
Sb	1.016	0.006*	0.076*	1.000	33.000	1.442 (LOG)
Hg	37.196	0.059*	0.243*	5.000	342.000	114.114 (LOG)
Bi	1.735	0.163*	0.404*	1.000	54.000	11.158 (LOG)
Cd	0.250	0.000*	0.000*	0.250	0.250	0.250 (LOG)
Co	1.575	0.212*	0.460*	0.500	93.000	13.117 (LOG)
Ni	13.500	0.068*	0.261*	2.000	211.000	44.907 (LOG)
V	85.758	0.069*	0.263*	0.500	457.000	287.865 (LOG)
Mn	236.871	0.080*	0.283*	23.000	6855.000	873.315 (LOG)
Mo	1.400	0.163*	0.403*	0.500	56.000	8.964 (LOG)
K	0.241	0.075*	0.273*	0.060	3.260	0.846 (LOG)
W	5.020	0.002*	0.041*	5.000	73.000	6.066 (LOG)

*:LOG

==== Detection Limit =====

Elements	B D.L	A.D.L (%)
Au	8.896	0.000
Ag	88.964	0.000
Cu	0.000	0.000
Pb	0.000	0.000
Zn	0.000	0.000
Fe	0.000	0.000
As	34.122	0.000
Sb	98.986	0.000
Hg	2.365	0.000
Bi	68.694	0.000
Cd	100.000	0.000
Co	38.176	0.000
Ni	0.000	0.000
V	0.225	0.000
Mn	0.000	0.000
Mo	35.811	0.000
K	0.000	0.000
W	99.775	0.000

==== Correlation Matrix =====

	Au	Ag	Cu	Pb	Zn	Fe	As	Sb	Hg	Bi	Cd	Co
Au	1.000											
Ag	-0.092	1.000										
Cu	0.190	-0.222	1.000									
Pb	-0.026	-0.248	0.219	1.000								
Zn	-0.071	-0.085	0.289	0.430	1.000							
Fe	-0.010	-0.478	0.397	0.589	0.414	1.000						
As	-0.083	-0.021	-0.098	0.131	-0.006	0.099	1.000					
Sb	0.000	0.016	-0.018	0.040	0.014	-0.038	0.100	1.000				
Hg	0.068	-0.093	0.015	0.098	0.065	0.107	0.054	-0.003	1.000			
Bi	0.026	-0.157	0.218	0.158	0.496	0.379	-0.189	-0.054	0.042	1.000		
Cd	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	
Co	0.039	0.010	0.157	0.114	0.485	-0.018	-0.184	0.025	0.022	0.302	0.000	1.000
Ni	0.295	-0.214	0.463	0.255	0.534	0.328	-0.133	-0.025	0.115	0.429	0.000	0.452
V	0.045	-0.465	0.400	0.628	0.466	0.868	0.035	-0.076	0.162	0.408	0.000	0.094
Mn	0.020	-0.267	0.427	0.435	0.686	0.560	-0.037	-0.036	0.048	0.547	0.000	0.382
Mo	-0.096	0.001	0.023	0.134	-0.266	-0.063	0.136	0.129	0.062	-0.554	0.000	-0.104
K	-0.109	0.257	-0.035	-0.019	0.148	-0.105	0.096	0.068	-0.075	-0.225	0.000	0.069
W	-0.037	-0.014	-0.007	0.102	0.047	0.008	0.015	0.635	0.011	-0.025	0.000	0.068

	Ni	V	Mn	Mo	K	W
Ni	1.000					
V	0.454	1.000				
Mn	0.498	0.578	1.000			
Mo	-0.169	-0.052	-0.244	1.000		
K	-0.187	-0.191	0.020	0.012	1.000	
W	-0.012	-0.006	-0.012	0.115	-0.007	1.000

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 ===== EDA Analysis =====
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Elements	L.Fence	L.Wisker	L.Hinge	Median	U.Hinge	U.Wisker	U.Fence
Au	0.179	1.000	2.000	4.000	10.000	13.000	111.803
Ag	0.100	0.100	0.100	0.100	0.100	0.100	0.100
Cu	3.286	9.000	10.000	14.000	21.000	25.000	63.907
Pb	20.052	31.000	33.000	40.000	46.000	49.000	75.705
Zn	10.194	19.000	21.000	26.000	34.000	37.000	70.044
Fe	1.600	2.890	3.490	4.770	5.870	6.230	12.804
As	0.032	1.000	1.000	5.000	10.000	11.000	316.228
Sb	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Hg	11.390	25.000	28.000	42.000	51.000	54.000	125.368
Bi	0.192	1.000	1.000	1.000	3.000	4.000	15.588
Cd	0.250	0.250	0.250	0.250	0.250	0.250	0.250
Co	0.022	0.500	0.500	2.000	4.000	4.000	90.510
Ni	2.934	8.000	9.000	13.000	19.000	21.000	58.280
V	28.305	58.000	67.000	91.000	119.000	127.000	281.679
Mn	65.167	144.000	169.000	228.000	319.000	356.000	827.269
Mo	0.034	0.500	0.500	2.000	3.000	3.000	44.091
K	0.042	0.140	0.150	0.230	0.350	0.410	1.247
W	5.000	5.000	5.000	5.000	5.000	5.000	5.000

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

File:area_g_reg.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 : 888 (1047)

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

Trace(Max. of Correlation Coefficient): 8.977

Number of factors : 6

N fact	EigenValue	%	Cum%
1	4.281	47.695	47.695
2	1.544	17.204	64.900
3	1.331	14.825	79.724
4	0.856	9.541	89.266
5	0.713	7.944	97.209
6	0.332	3.702	100.911

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

(before rotation)

Elements	1	2	3	4	5	6	Comm.
Au	-0.097	0.102	-0.050	-0.398	-0.227	0.147	0.254
Ag	0.417	0.280	0.210	0.287	-0.058	0.062	0.386
Cu	-0.506	-0.017	-0.009	-0.164	-0.309	0.303	0.471
Pb	-0.585	-0.395	0.023	0.246	-0.072	-0.129	0.582
Zn	-0.714	0.230	0.278	0.328	-0.026	-0.030	0.750
Fe	-0.790	-0.400	-0.219	0.052	0.178	0.131	0.884
As	0.051	-0.301	-0.014	0.211	0.049	0.053	0.143
Sb	0.051	-0.327	0.688	-0.182	0.131	0.098	0.643
Hg	-0.126	-0.099	-0.036	-0.071	-0.068	-0.188	0.072
Bi	-0.609	0.385	0.040	-0.125	0.328	-0.066	0.648
Cd	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Co	-0.360	0.381	0.347	0.069	-0.264	-0.203	0.511
Ni	-0.649	0.233	0.103	-0.232	-0.282	-0.034	0.621
V	-0.845	-0.327	-0.206	-0.016	0.058	-0.059	0.870
Mn	-0.796	0.140	0.102	0.156	0.000	0.089	0.697
Mo	0.239	-0.540	0.029	0.078	-0.458	-0.124	0.581
K	0.130	0.045	0.191	0.432	-0.085	0.242	0.308
W	-0.007	-0.333	0.679	-0.207	0.152	-0.034	0.638

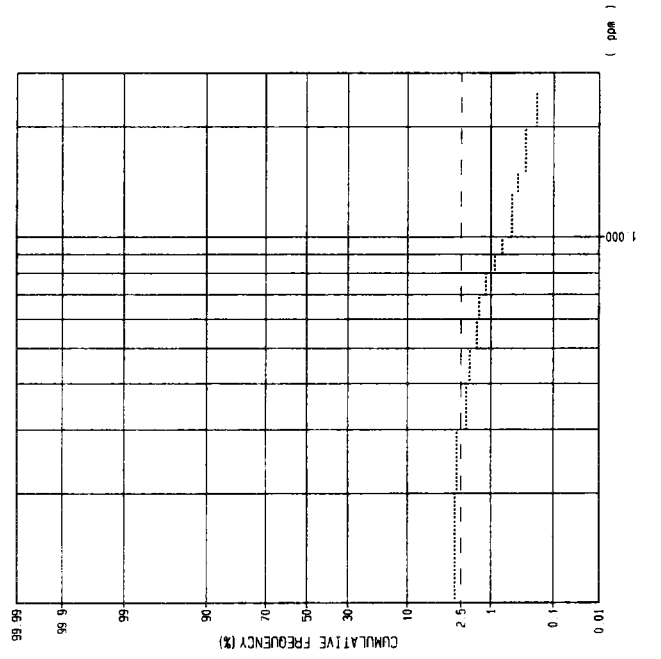
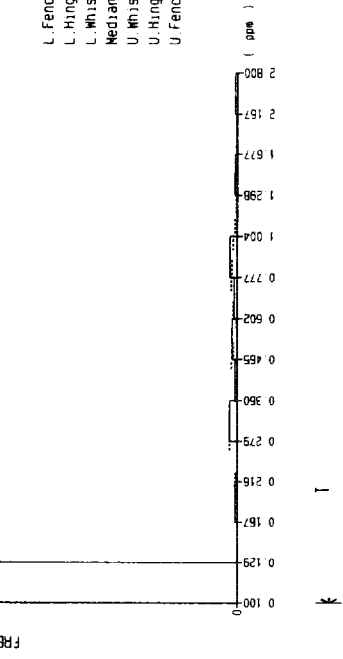
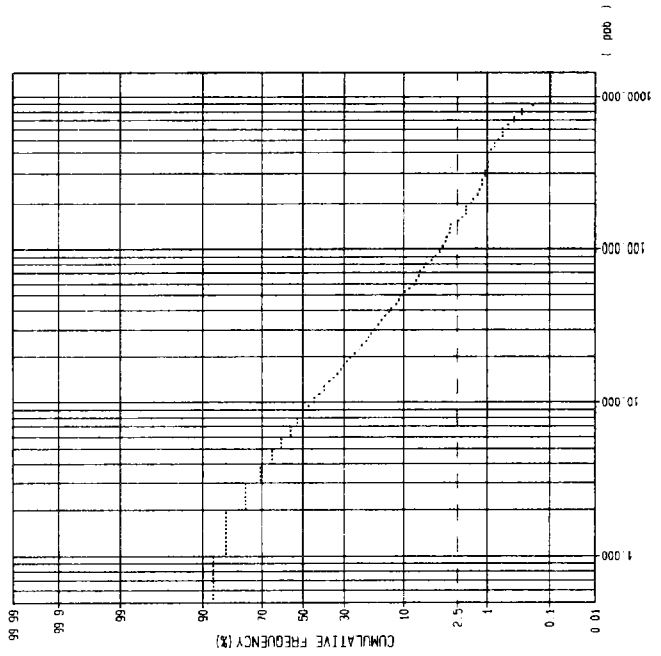
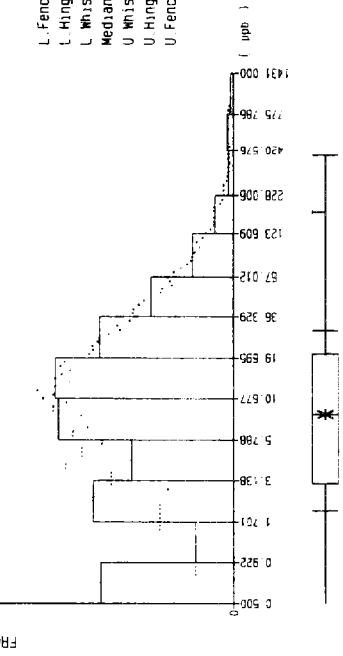
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 Factor Loading
 (after rotation Varimax)

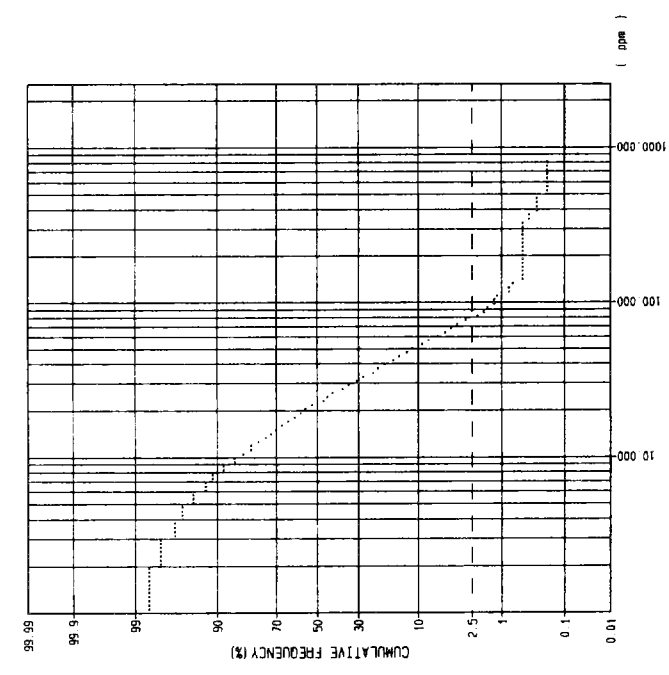
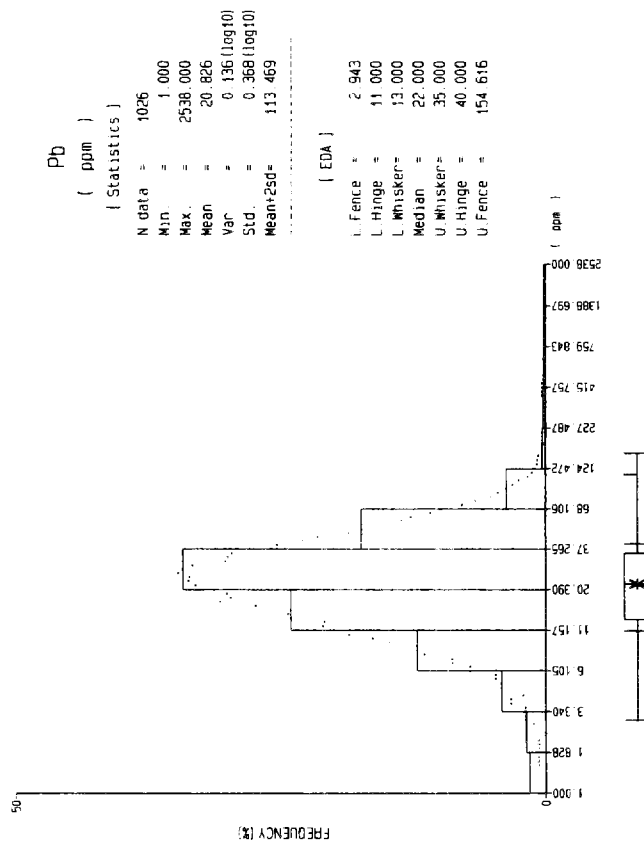
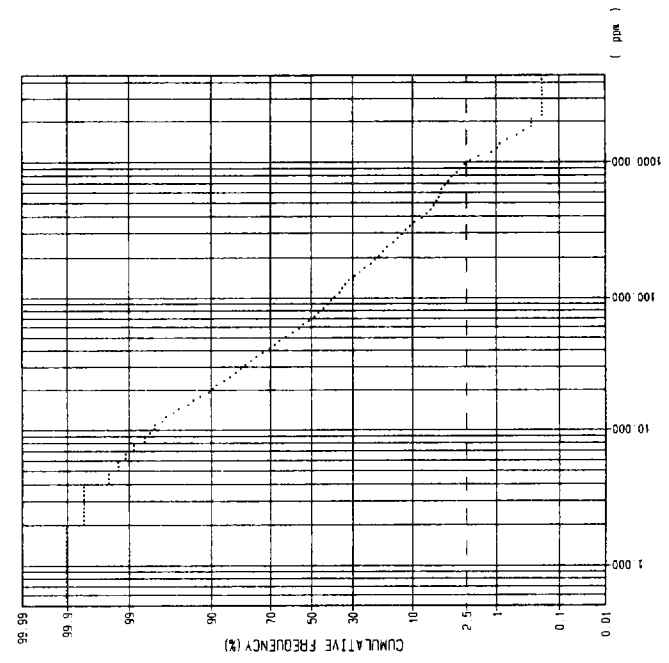
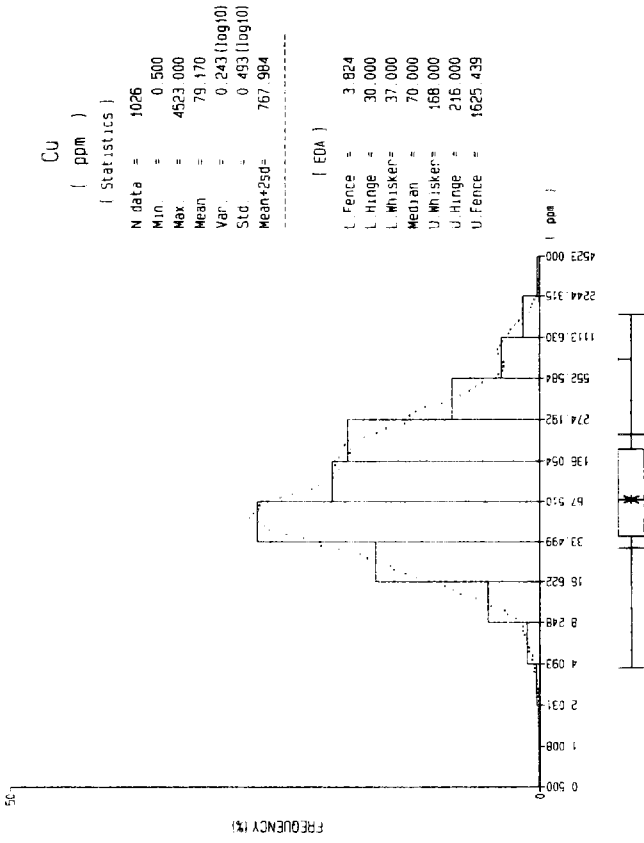
Elements	1	2	3	4	5	6	Comm.
Au	0.039	0.013	-0.011	-0.486	0.027	-0.125	0.254
Ag	0.459	0.098	-0.027	0.181	-0.043	0.362	0.386
Cu	-0.398	0.206	-0.041	-0.513	-0.013	0.069	0.471
Pb	-0.677	0.245	0.049	0.136	-0.192	-0.077	0.582
Zn	-0.454	0.671	0.015	0.052	0.244	0.174	0.750
Fe	-0.925	-0.016	-0.021	-0.053	0.121	-0.095	0.884
As	-0.166	-0.155	0.044	0.191	-0.194	0.124	0.143
Sb	-0.006	0.003	0.786	-0.024	-0.094	0.122	0.643
Hg	-0.105	0.077	0.006	0.004	-0.084	-0.218	0.072
Bi	-0.292	0.338	0.007	-0.067	0.648	-0.154	0.648
Cd	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Co	0.021	0.701	0.044	-0.095	0.091	-0.010	0.511
Ni	-0.301	0.532	-0.017	-0.435	0.159	-0.180	0.621
Y	-0.872	0.151	-0.051	-0.080	0.082	-0.267	0.870
Mn	-0.589	0.494	-0.036	-0.119	0.286	0.093	0.697
Mo	-0.015	-0.091	0.076	0.020	-0.750	-0.062	0.581
K	0.055	0.100	-0.017	0.148	-0.126	0.506	0.308
W	-0.033	0.057	0.792	0.026	-0.080	-0.003	0.638

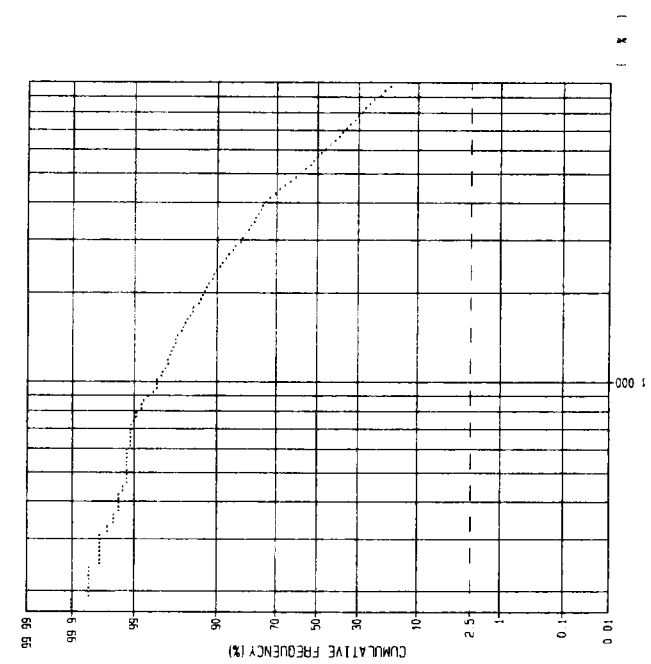
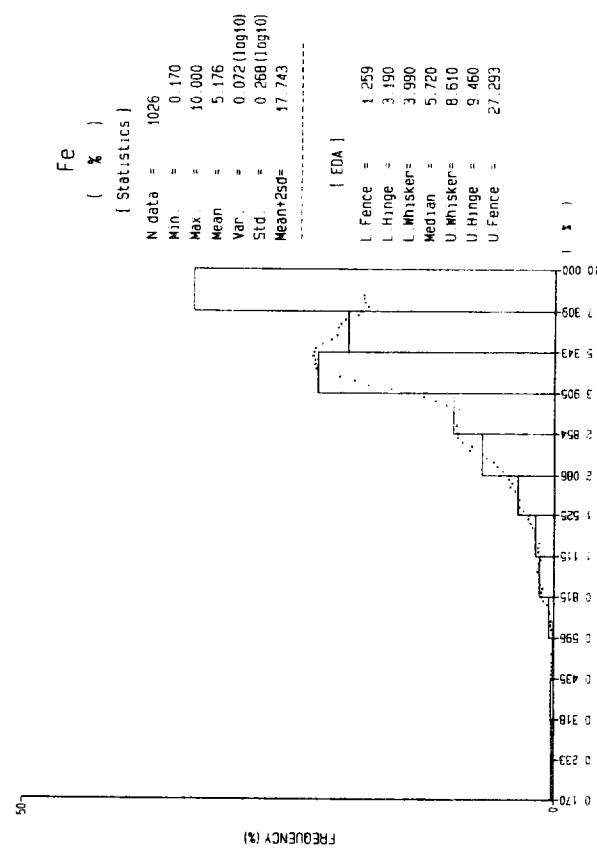
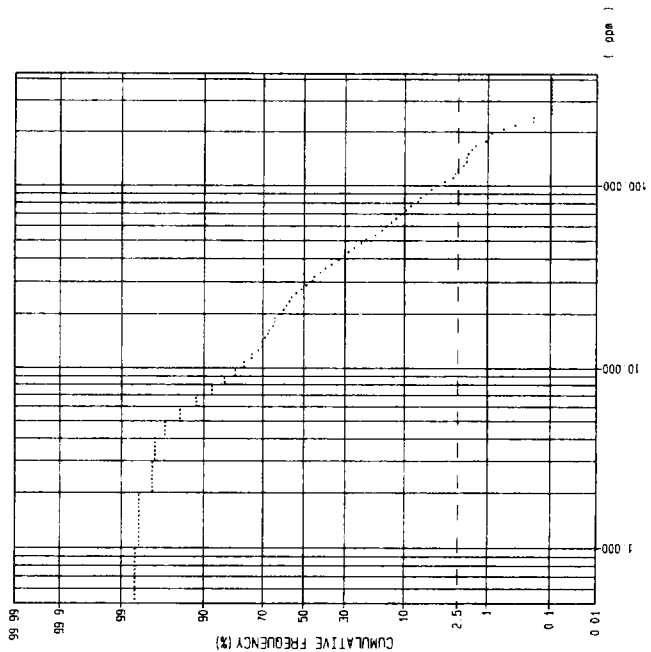
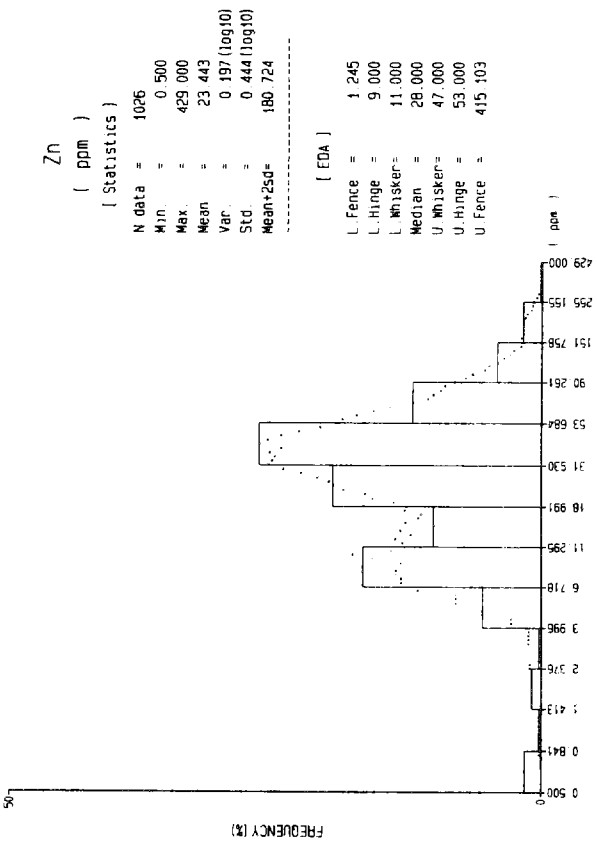
N fact	Contribution	%	Cum%
1	3.218	35.854	35.854
2	1.770	19.714	55.567
3	1.265	14.092	69.659
4	0.839	9.350	79.009
5	1.295	14.421	93.431
6	0.672	7.481	100.911

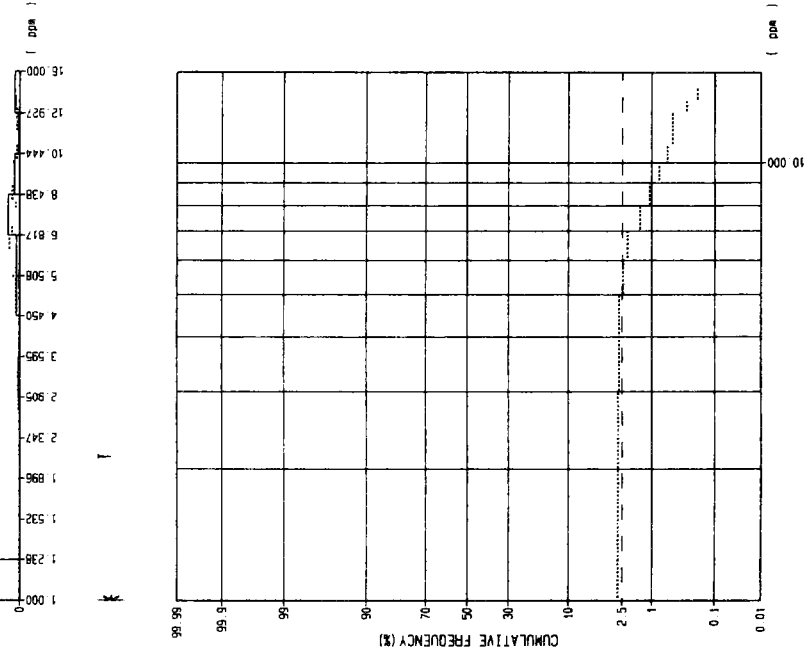
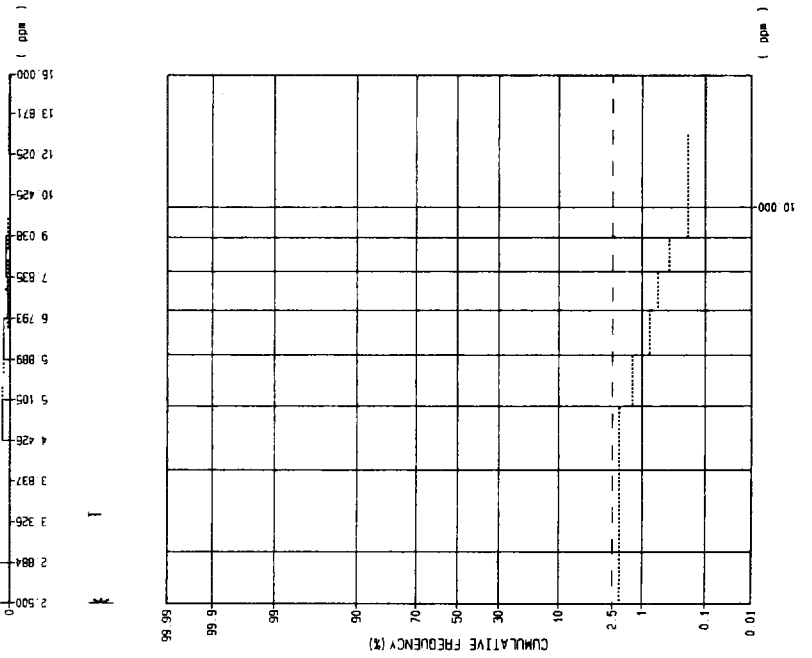
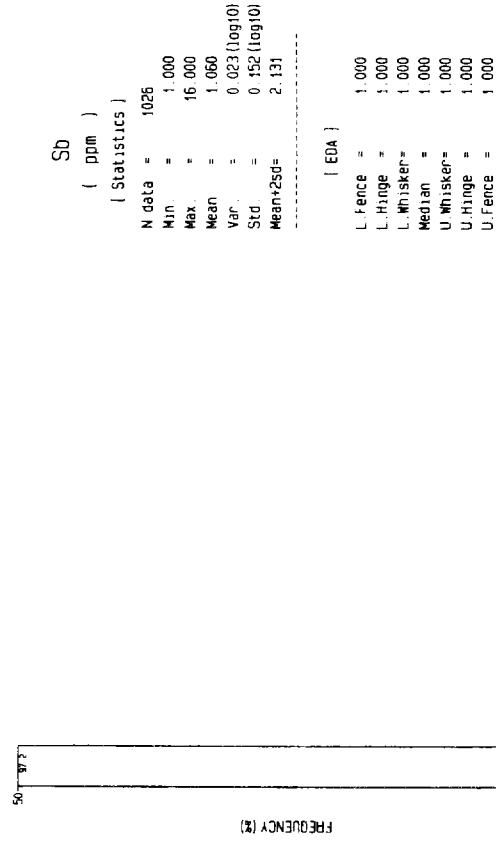
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 Factor Score
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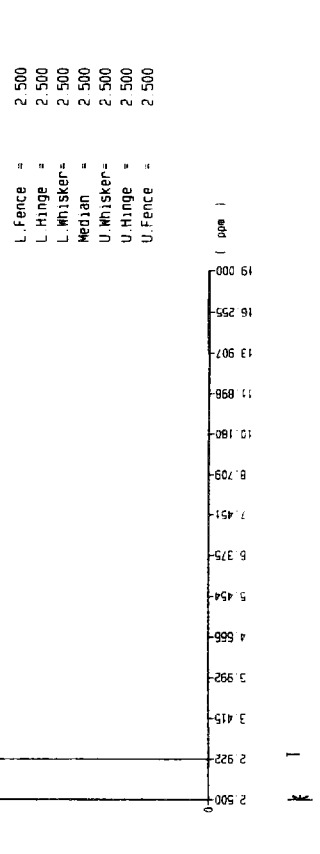
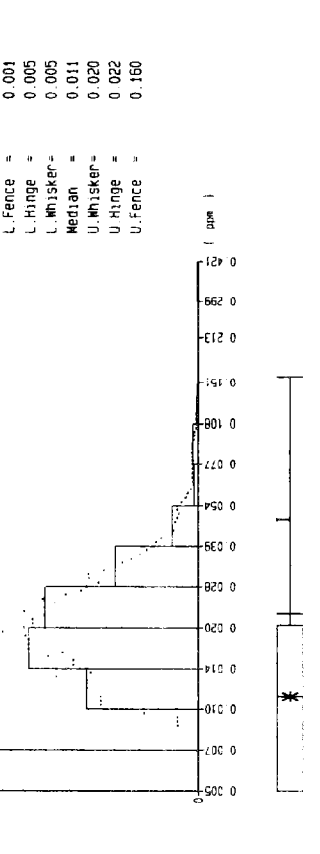
Elements	<Weight>					
	1	2	3	4	5	6
Au	0.020	-0.019	0.002	-0.278	-0.008	-0.014
Ag	0.028	0.068	-0.036	0.079	-0.003	0.260
Cu	-0.038	0.007	-0.027	-0.394	-0.082	0.181
Pb	-0.117	0.130	0.004	0.195	-0.224	-0.040
Zn	-0.066	0.403	-0.014	0.235	0.030	0.281
Fe	-0.556	-0.473	0.014	-0.020	0.151	0.382
As	-0.050	-0.043	0.002	0.076	-0.055	0.053
Sb	-0.040	-0.043	0.479	-0.069	0.000	0.128
Hg	0.011	0.040	0.003	0.029	-0.048	-0.121
Bi	0.079	0.067	0.058	0.063	0.360	-0.225
Cd	0.000	0.000	0.000	0.000	0.000	0.000
Co	0.068	0.309	0.004	0.007	-0.059	-0.075
Ni	0.061	0.174	0.005	-0.343	-0.033	-0.151
Y	-0.267	0.089	-0.045	0.070	-0.096	-0.549
Mn	-0.112	0.172	-0.024	-0.067	0.092	0.221
Mo	-0.019	0.118	-0.019	-0.003	-0.486	-0.106
K	-0.018	0.022	-0.029	0.014	-0.056	0.238
W	0.010	0.028	0.490	0.023	0.010	-0.080

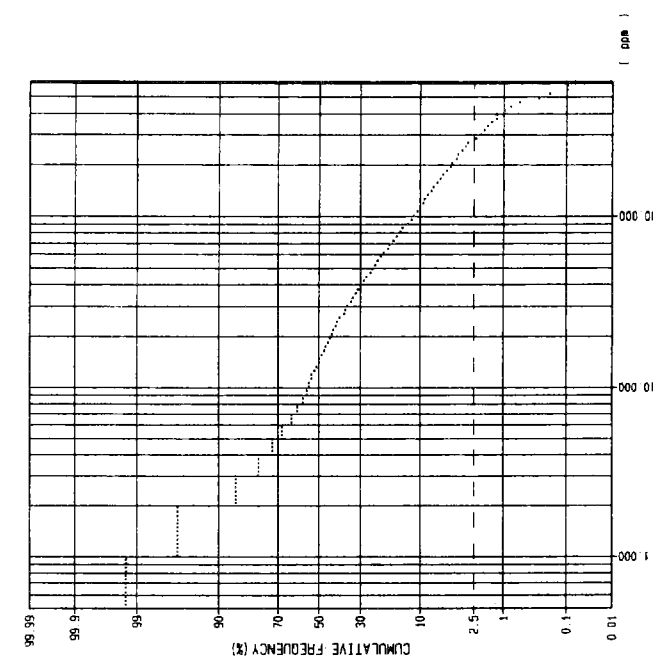
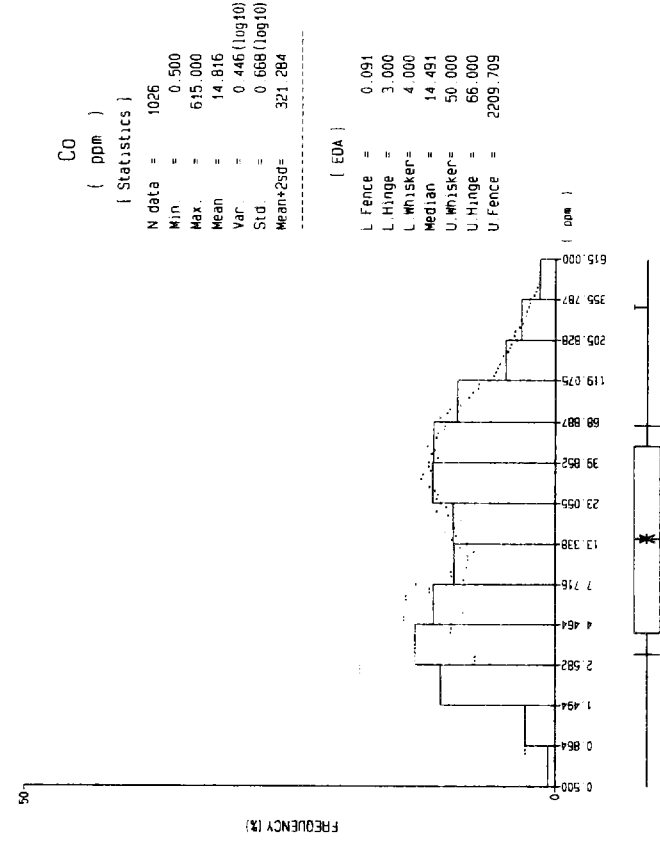
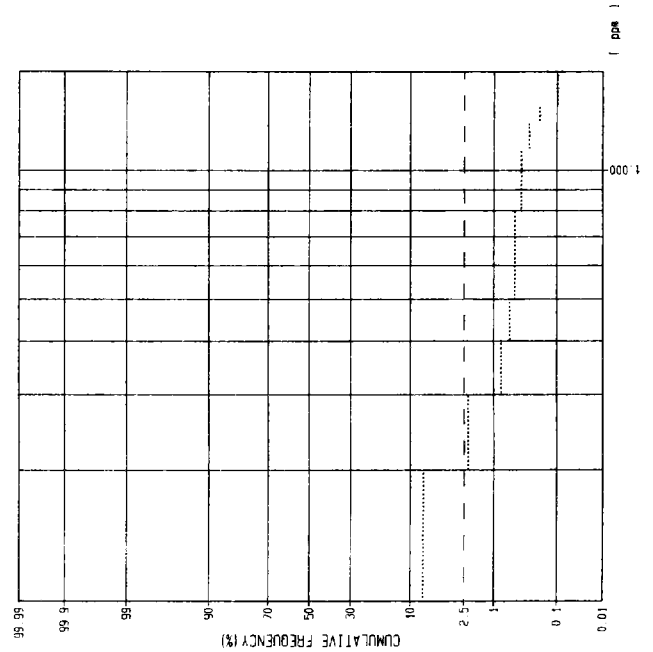


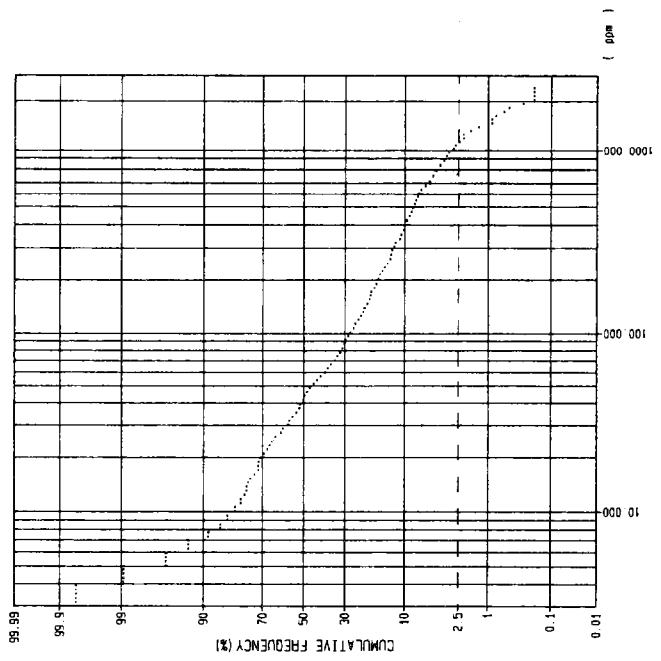
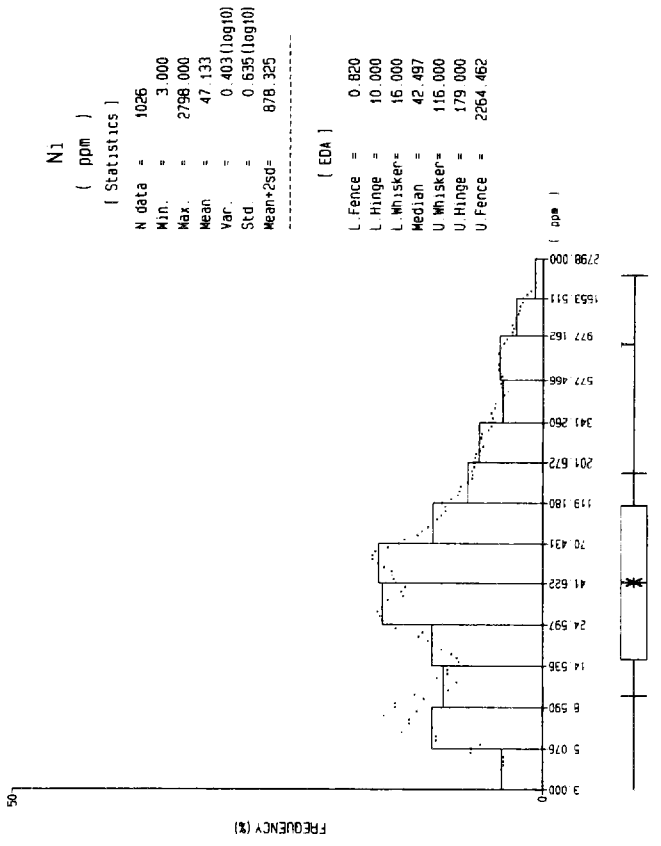
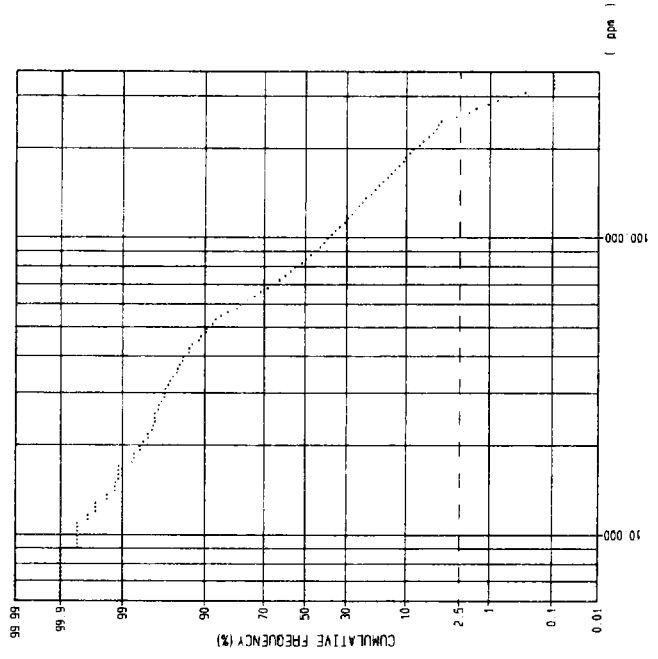
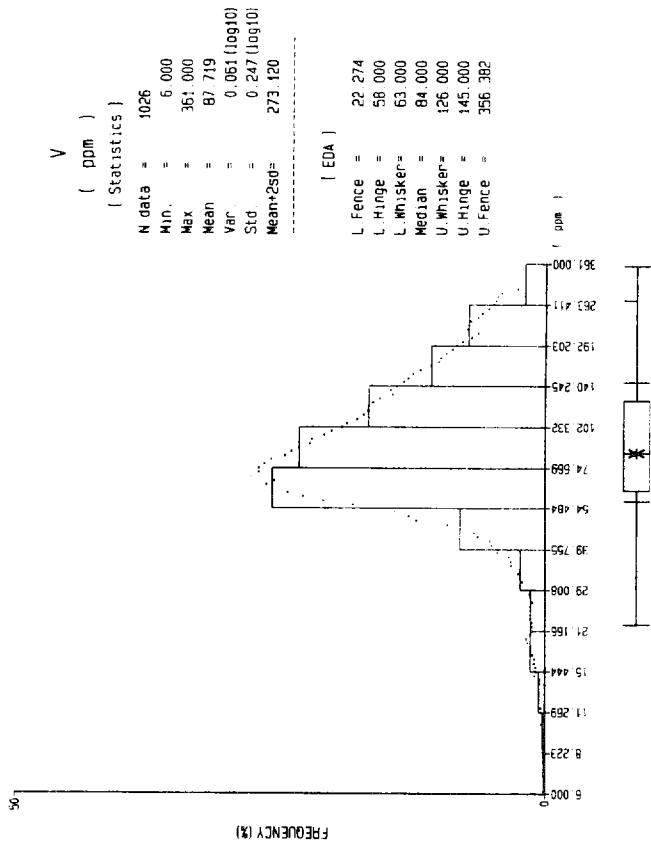












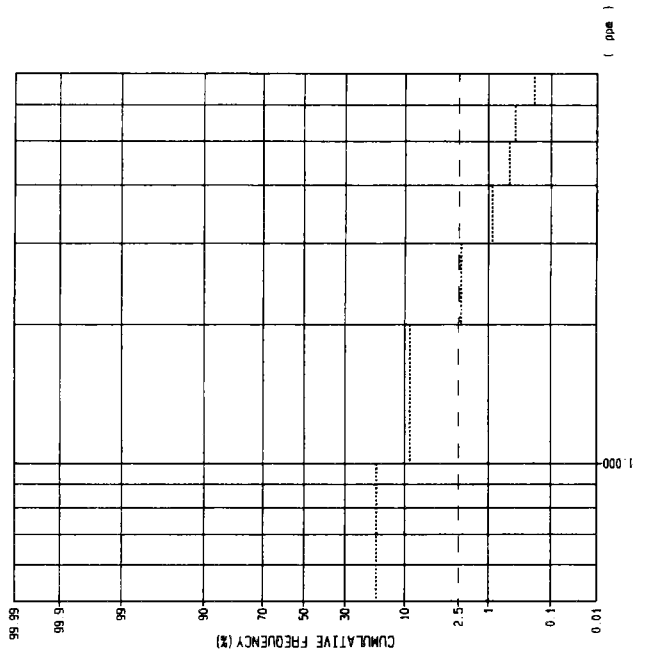
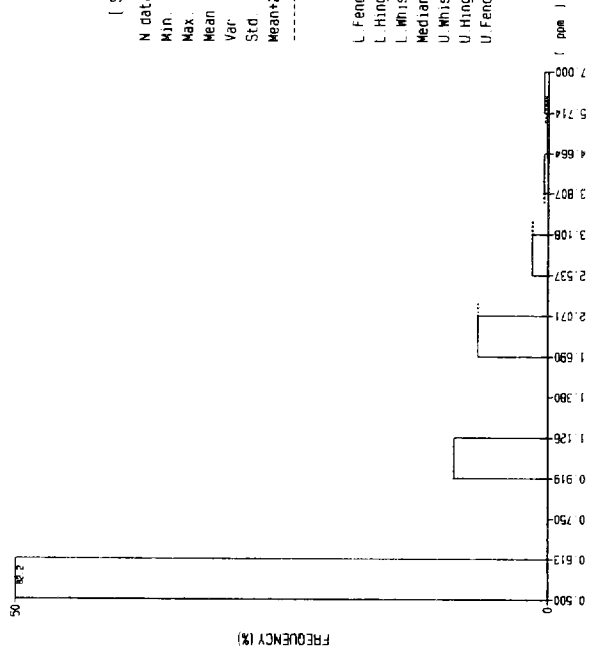
MU
(ppm)

(Statistics)

N data = 1026
 Min = 0.500
 Max = 7.000
 Mean = 0.511
 Var = 0.042 (log10)
 Std = 0.206 (log10)
 Mean+2sd = 1.576

(EDA)

L.Fence = 0.500
 L.Hinge = 0.500
 L.Whisker = 0.500
 Median = 0.500
 U.Whisker = 0.500
 U.Hinge = 0.500
 U.Fence = 0.500



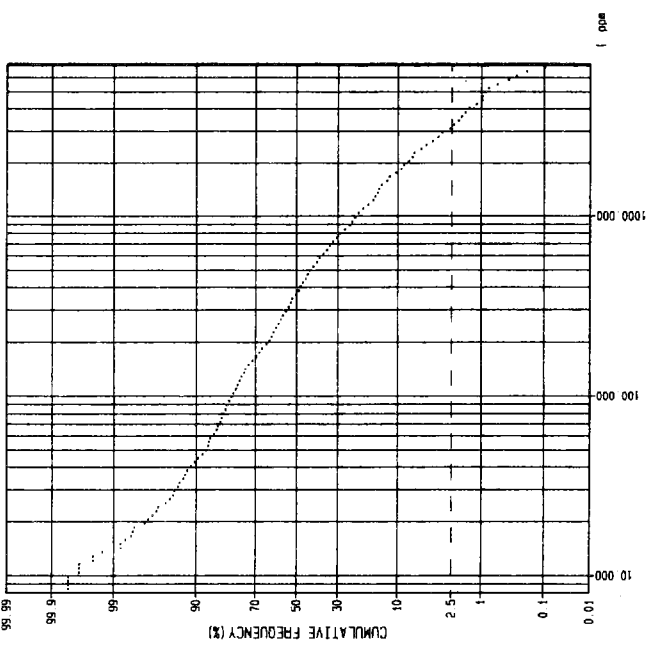
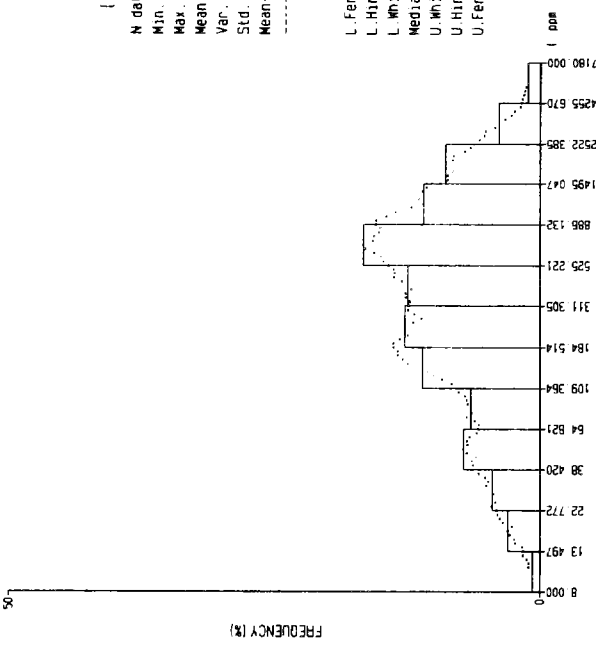
MU
(ppm)

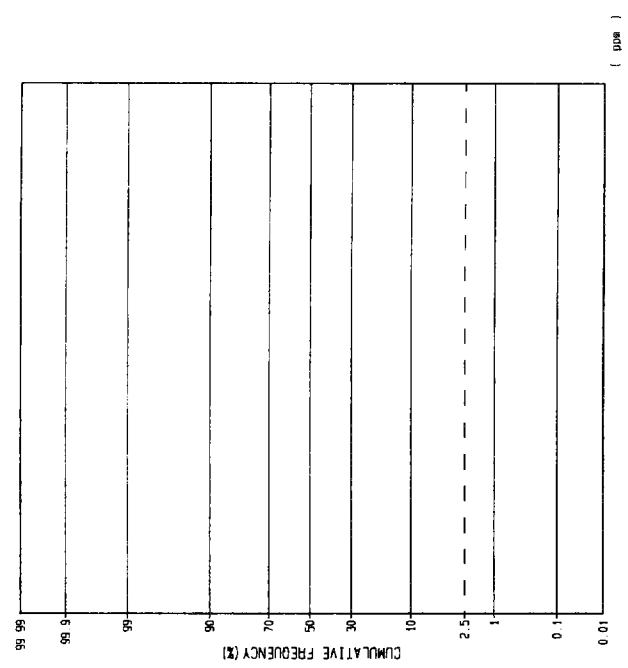
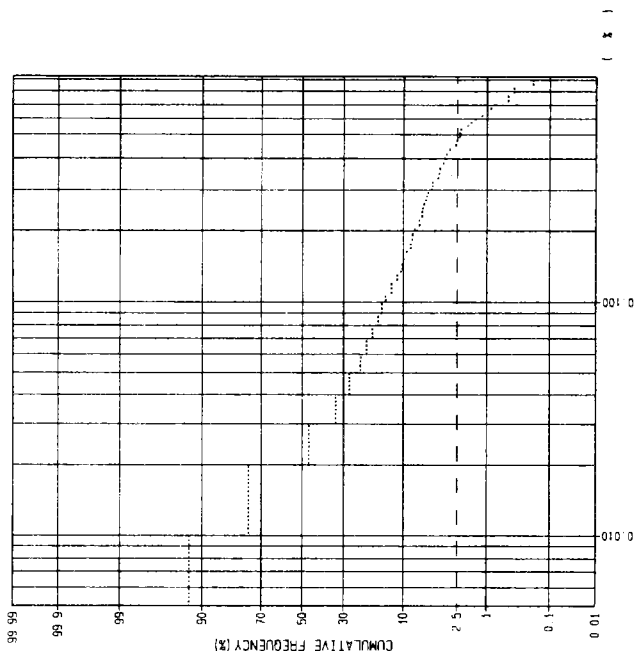
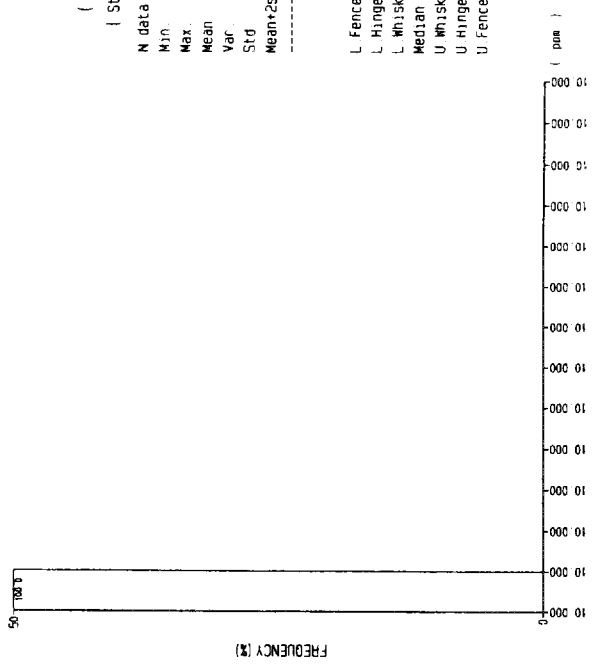
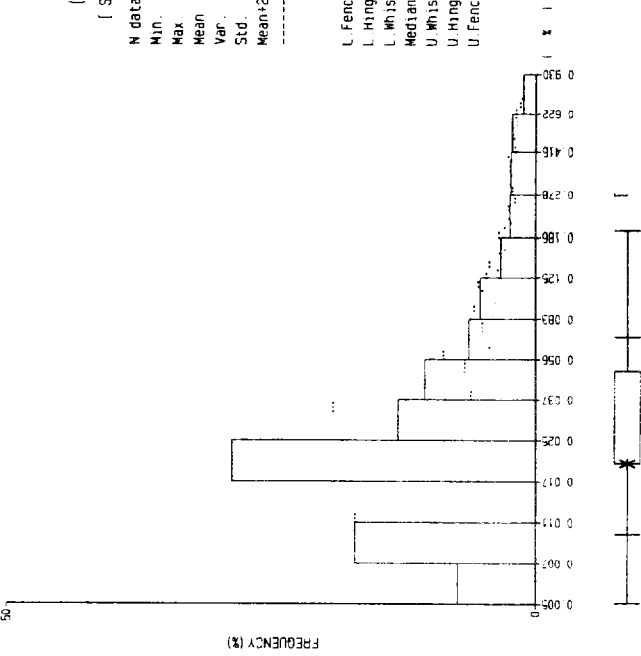
(Statistics)

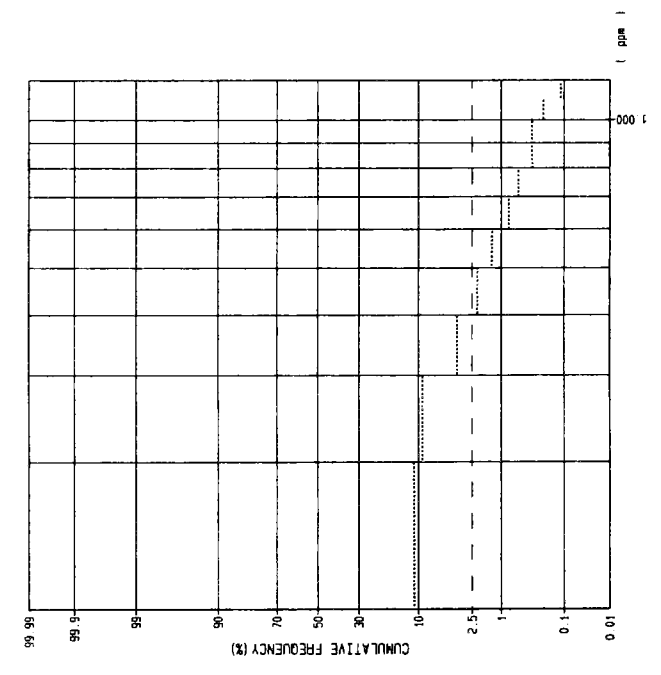
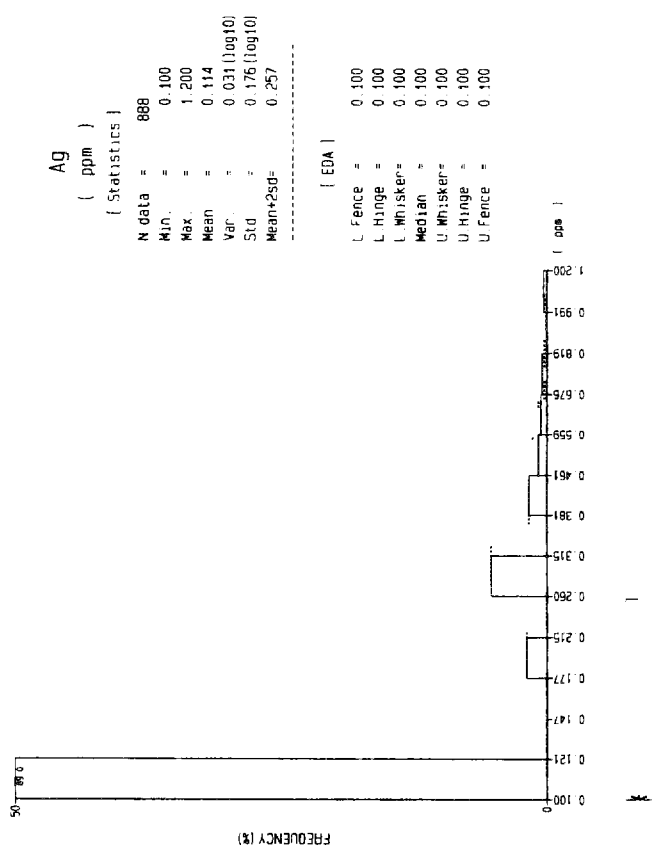
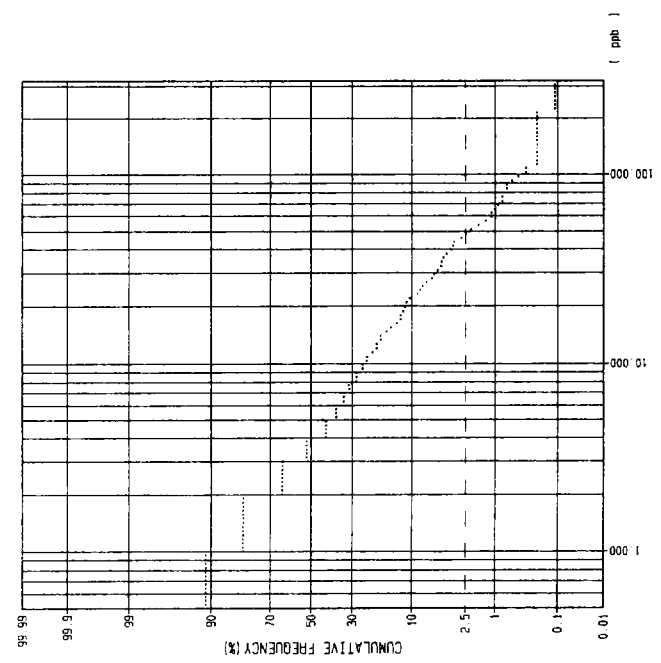
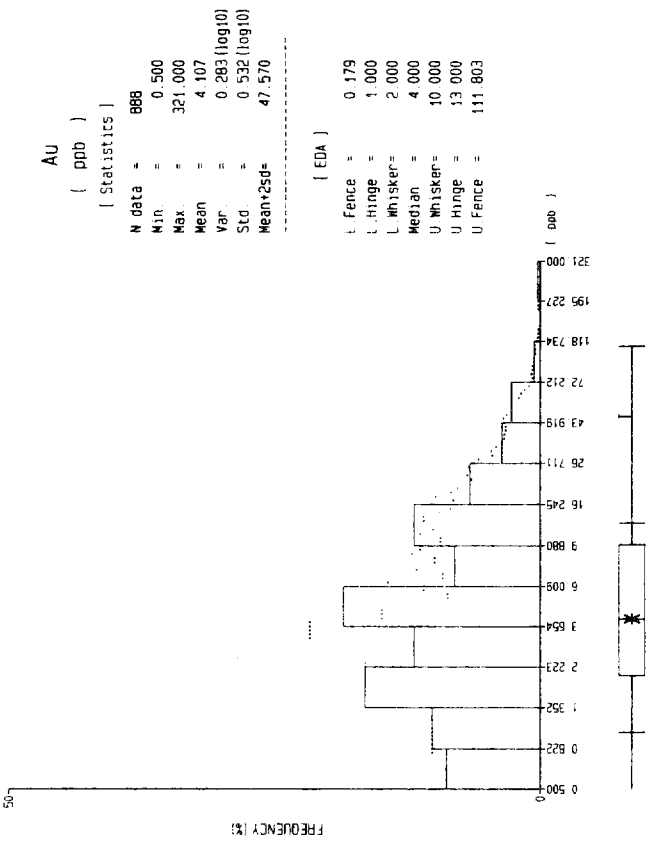
N data = 1026
 Min = 8.000
 Max = 7180.000
 Mean = 324.064
 Var = 0.358 (log10)
 Std = 0.599 (log10)
 Mean+2sd = 5105.710

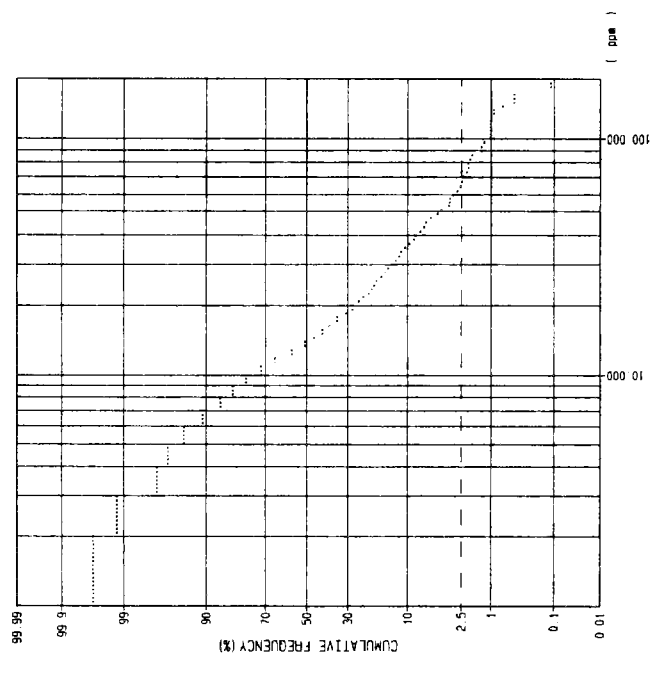
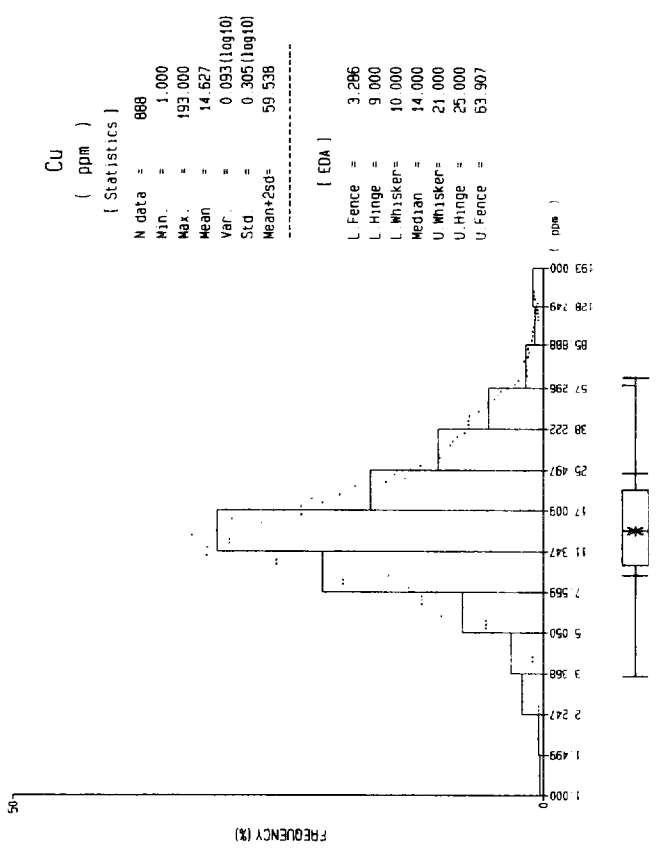
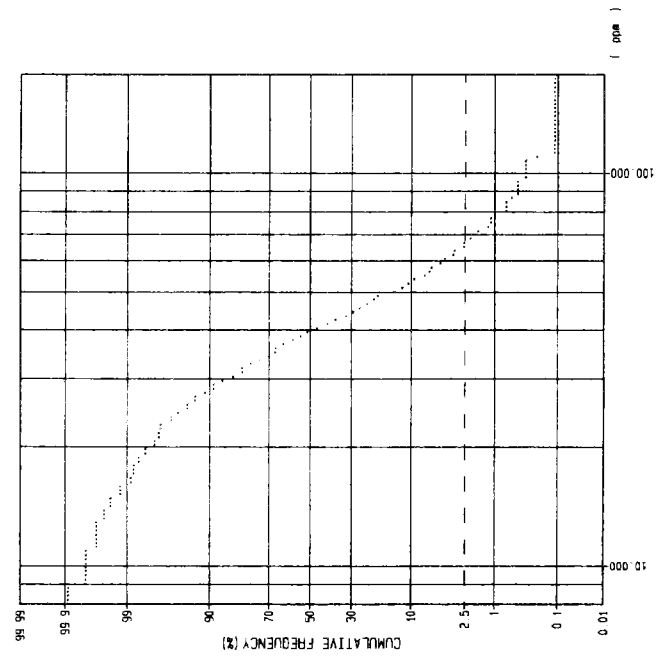
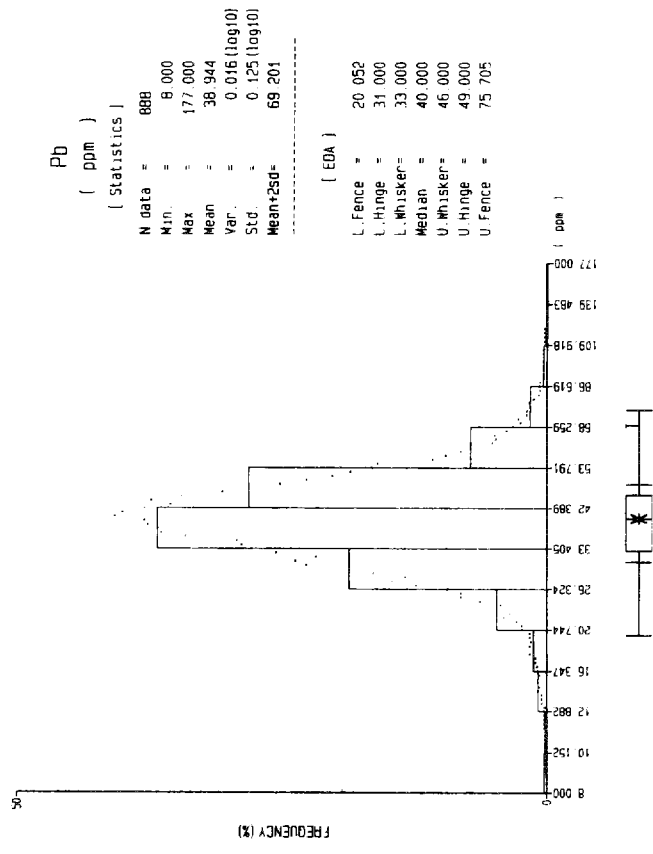
(EDA)

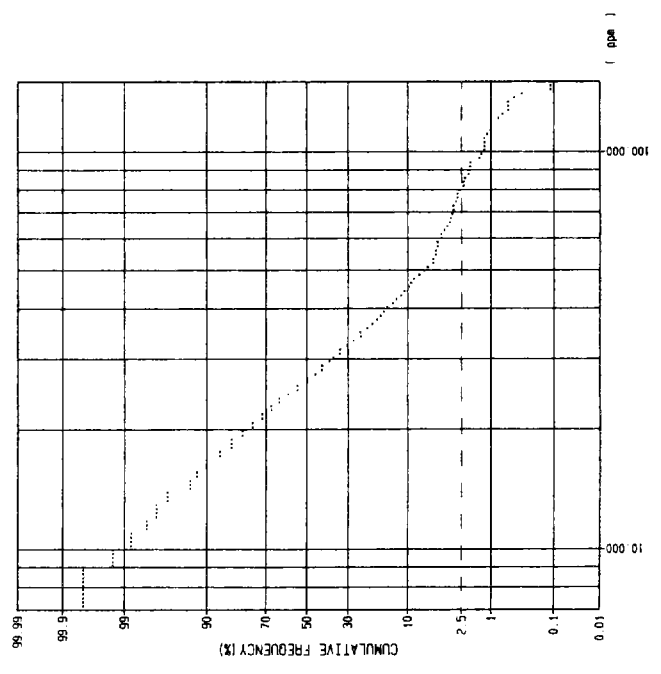
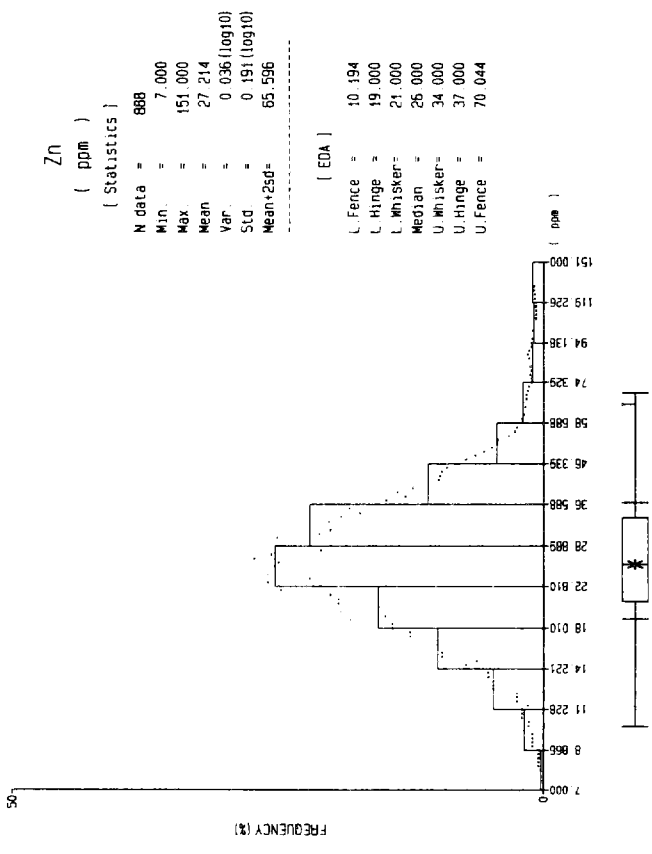
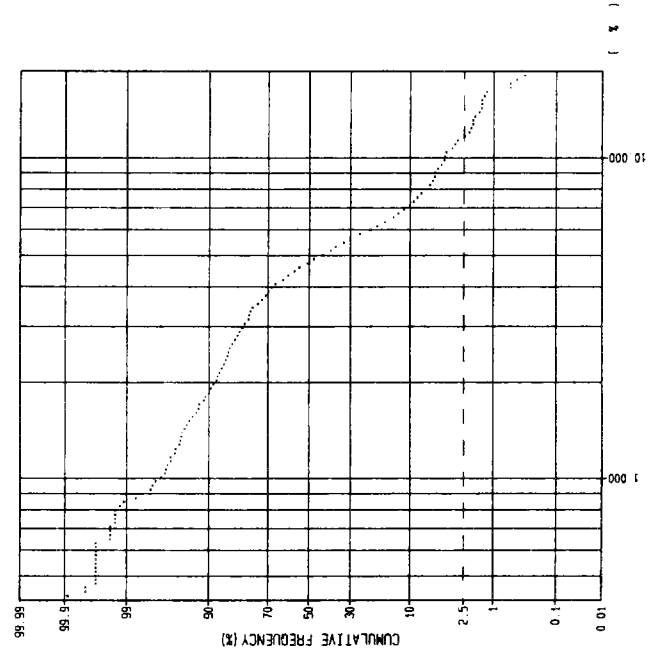
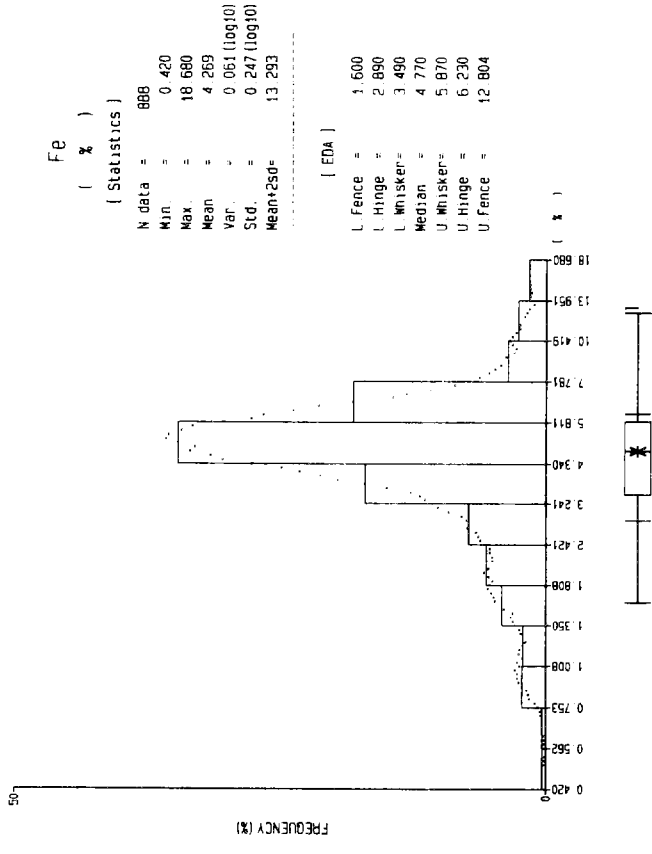
L.Fence = 7.868
 L.Hinge = 89.000
 L.Whisker = 134.000
 Median = 370.500
 U.Whisker = 887.000
 U.Hinge = 1131.000
 U.Fence = 15106.082











AS

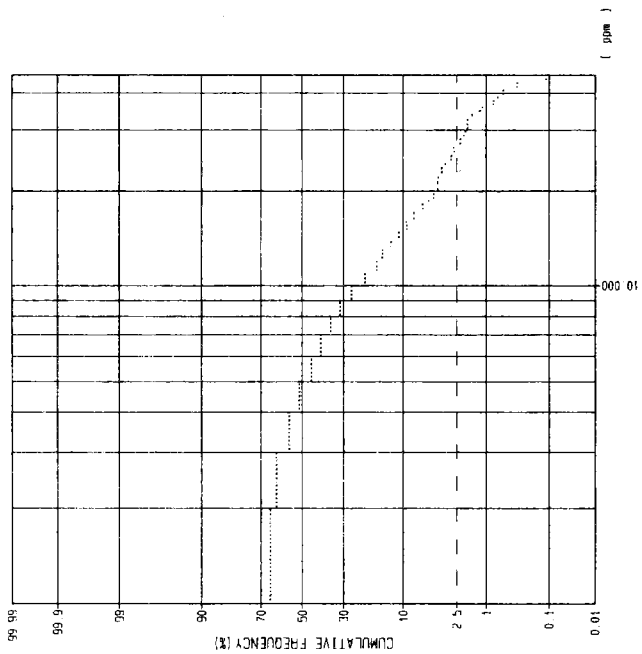
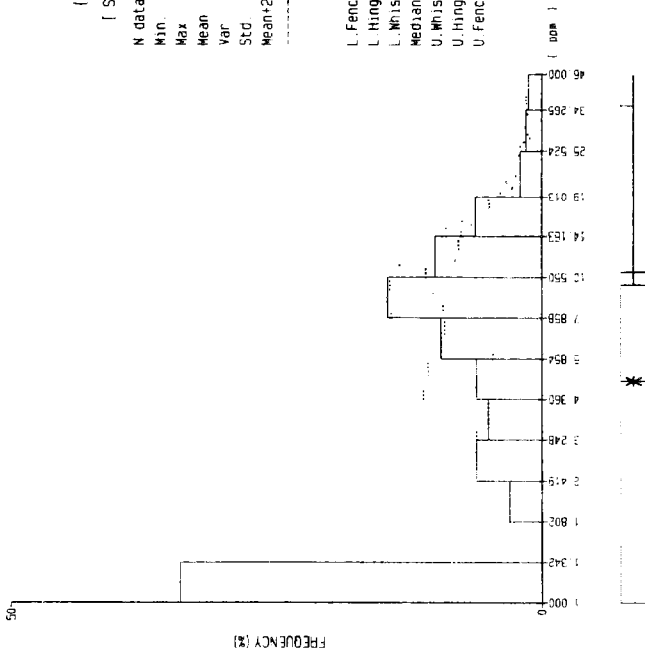
(ppm)

[Statistics]

N data = 888
 Min = 1.000
 Max = 46.000
 Mean = 3.853
 Var = 0.234 (log10)
 Std = 0.483 (log10)
 Mean+25d = 35.688

[EDA]

L.Fence = 0.032
 L.Hinge = 1.000
 L.Whisker = 1.000
 Median = 5.000
 U.Whisker = 10.000
 U.Hinge = 11.000
 U.Fence = 316.228



Sb

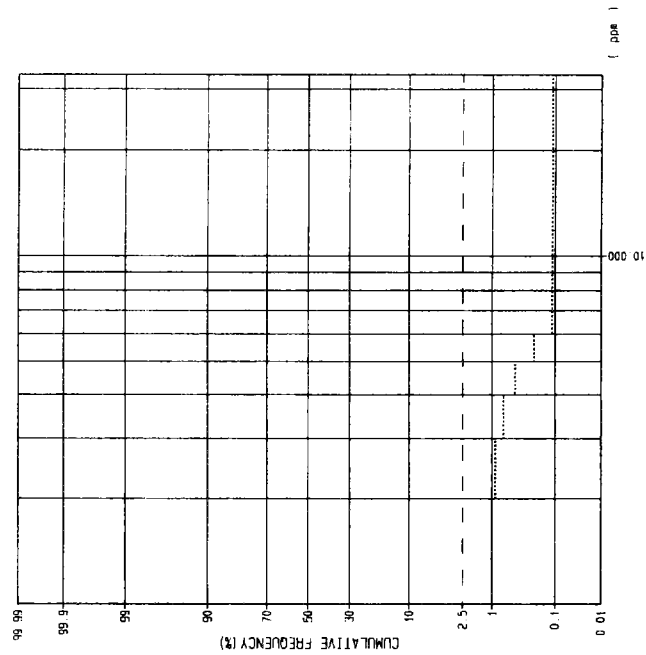
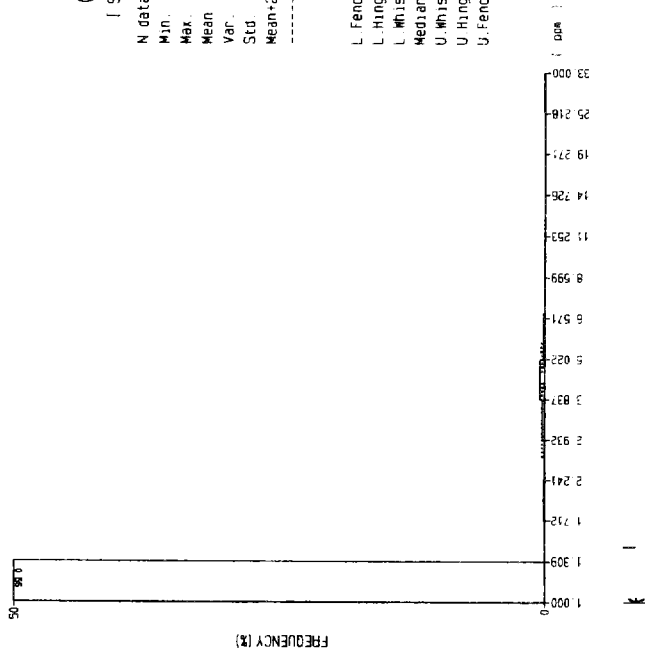
(ppm)

[Statistics]

N data = 888
 Min = 1.000
 Max = 33.000
 Mean = 1.016
 Var = 0.006 (log10)
 Std = 0.076 (log10)
 Mean+25d = 1.442

[EDA]

L.Fence = 1.000
 L.Hinge = 1.000
 L.Whisker = 1.000
 Median = 1.000
 U.Whisker = 1.000
 U.Hinge = 1.000
 U.Fence = 1.000



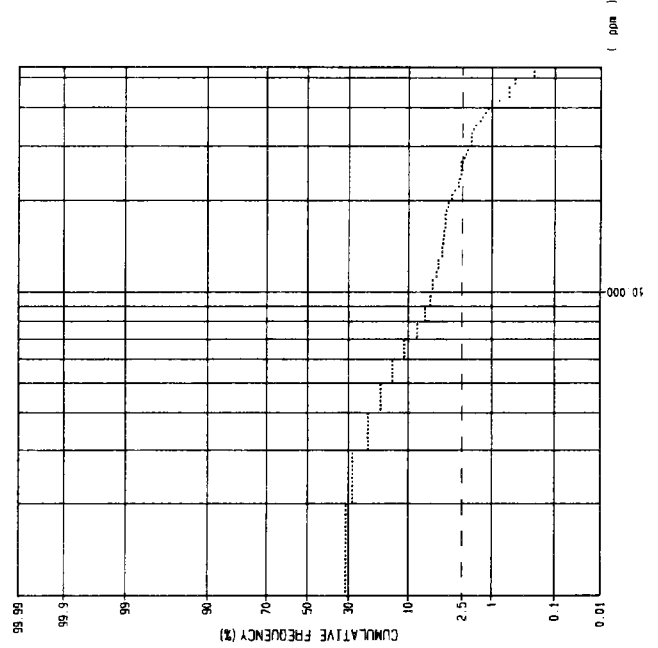
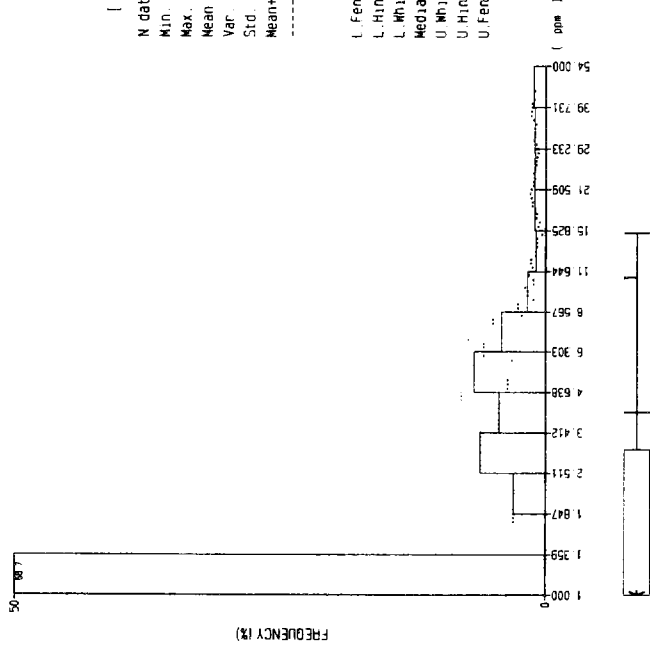
B1
(ppm)

[Statistics]

N data = 888
 Min. = 1.000
 Max. = 54.000
 Mean = 1.735
 Var. = 0.163 (log10)
 Std. = 0.404 (log10)
 Mean±2sd= 11.158

[EDA]

L.Fence = 0.192
 L.Hinge = 1.000
 L.Whisker = 1.000
 Median = 1.000
 U.Whisker = 3.000
 U.Hinge = 4.000
 U.Fence = 15.588



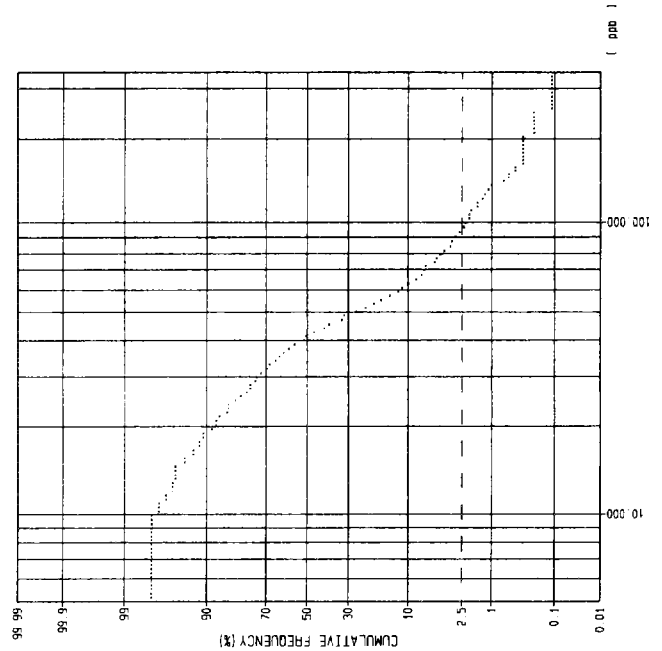
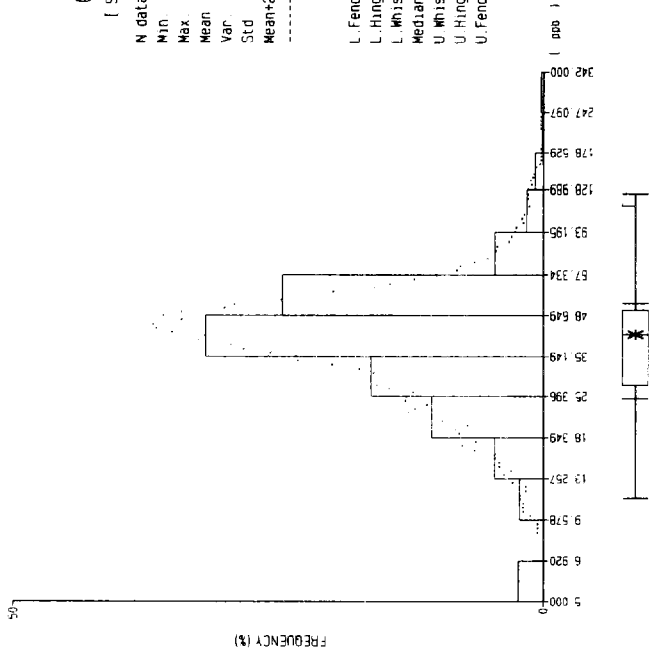
Hg
(ppb)

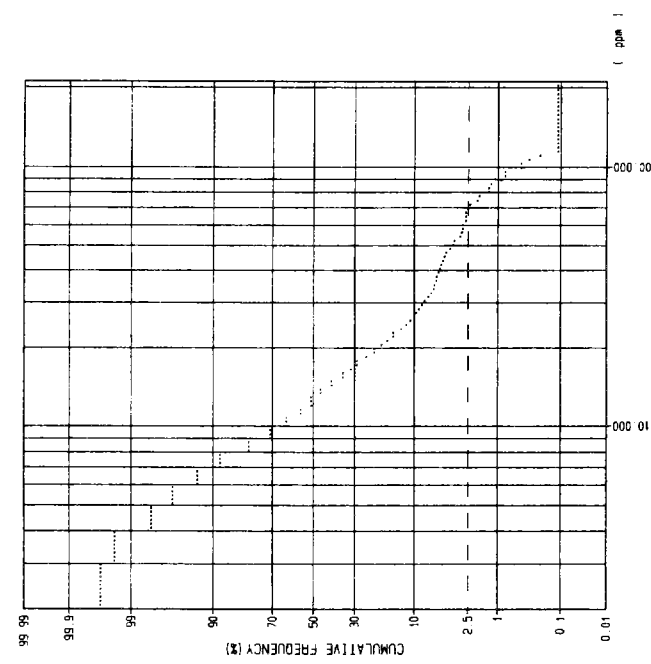
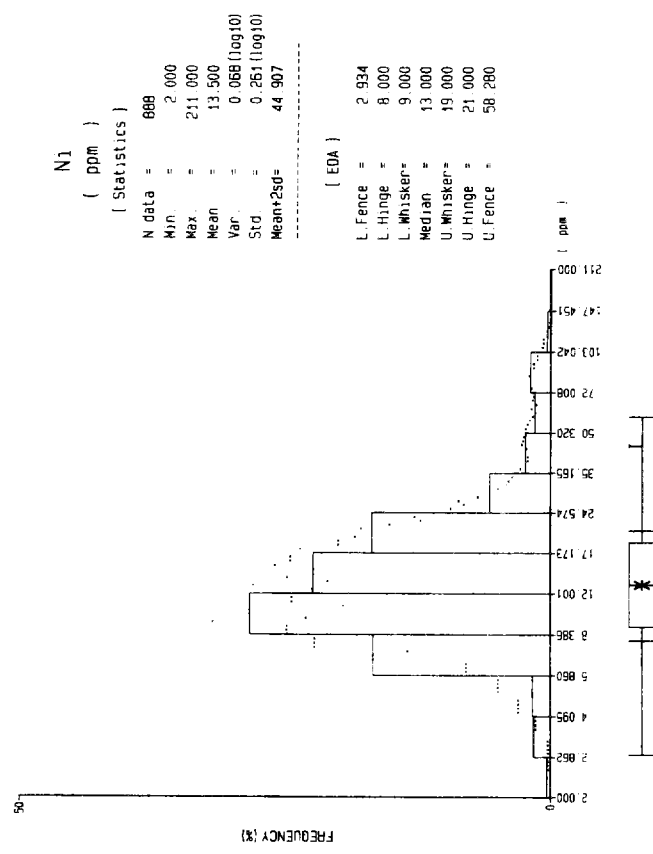
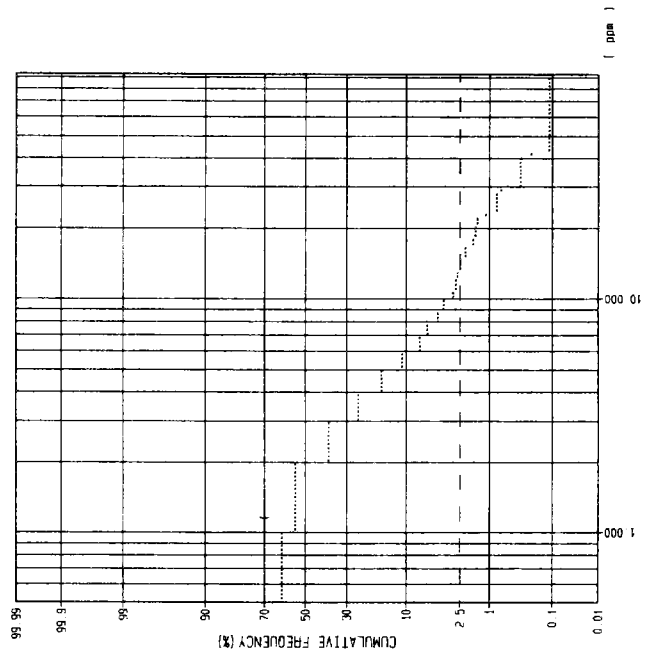
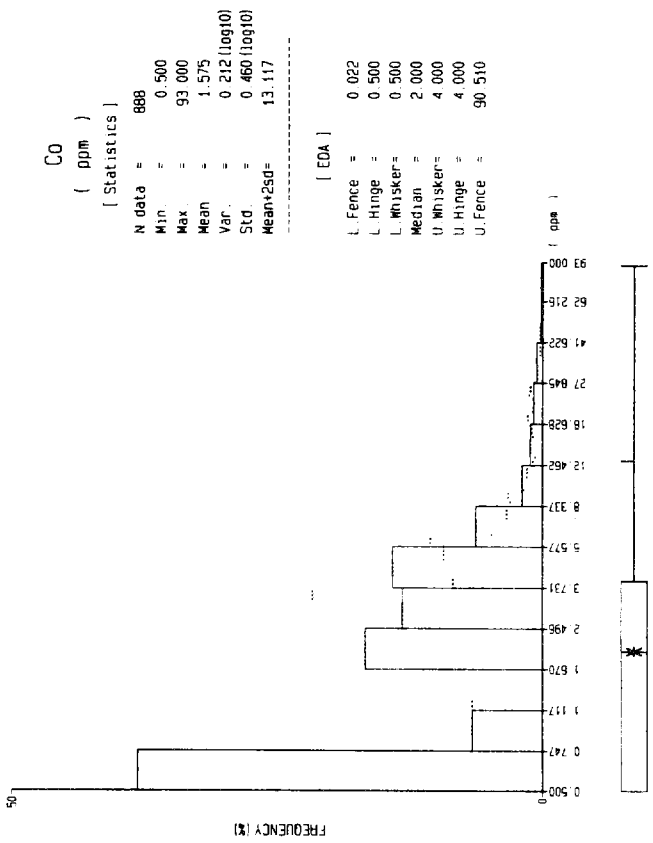
[Statistics]

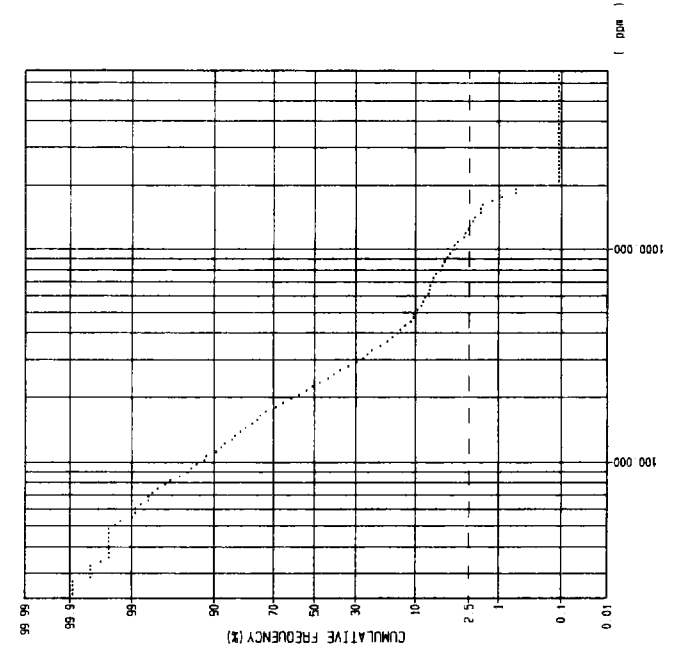
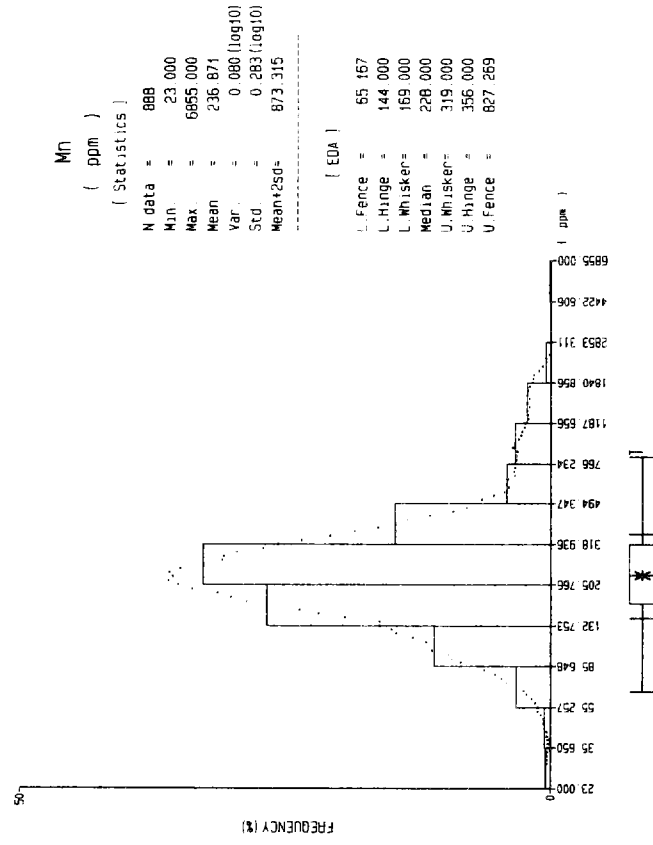
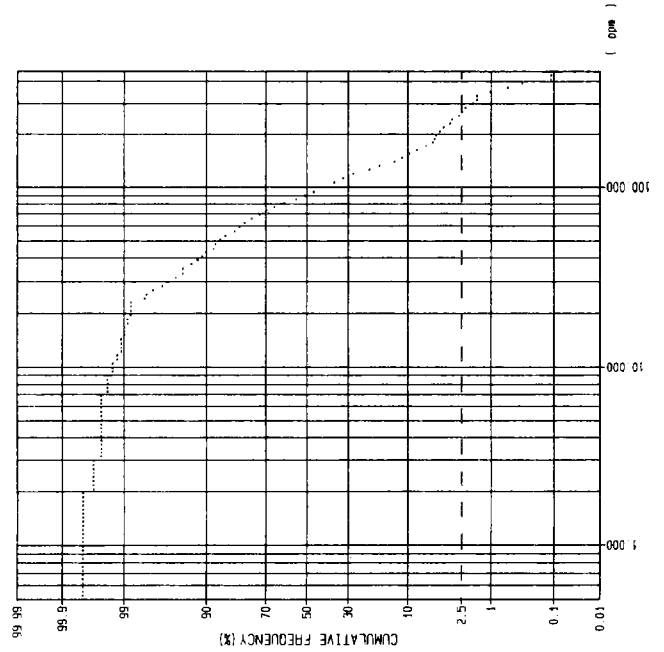
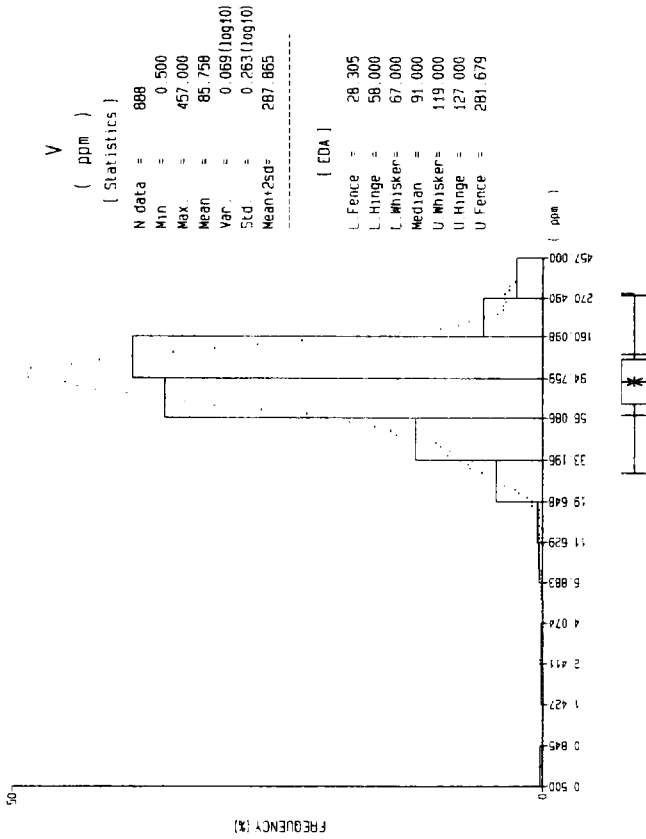
N data = 888
 Min. = 5.000
 Max. = 342.000
 Mean = 37.196
 Var. = 0.059 (log10)
 Std. = 0.243 (log10)
 Mean±2sd= 114.114

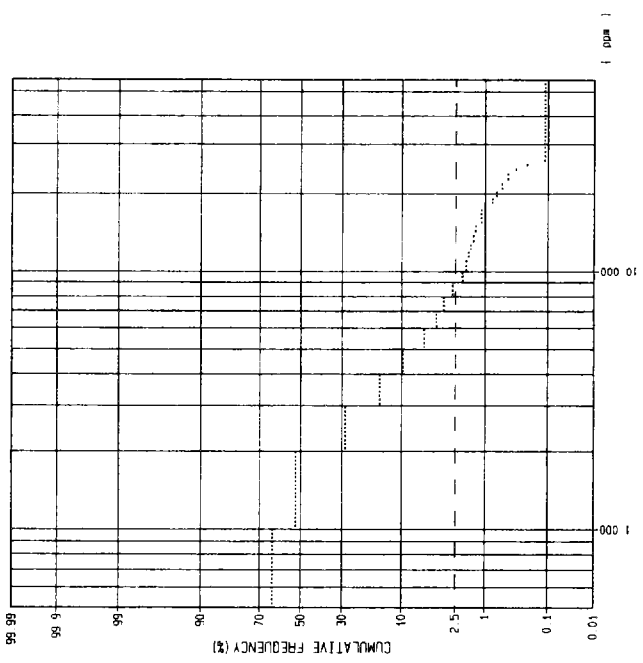
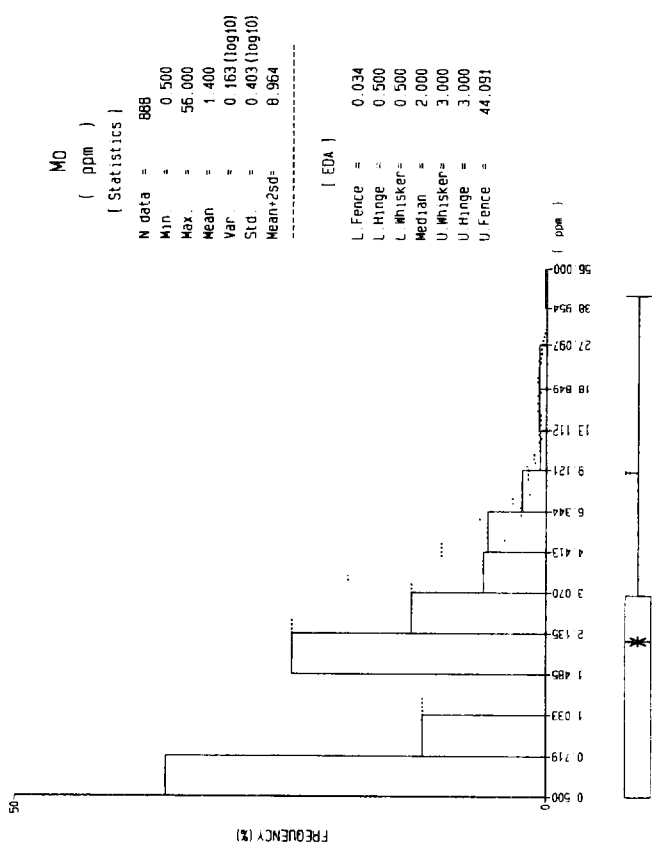
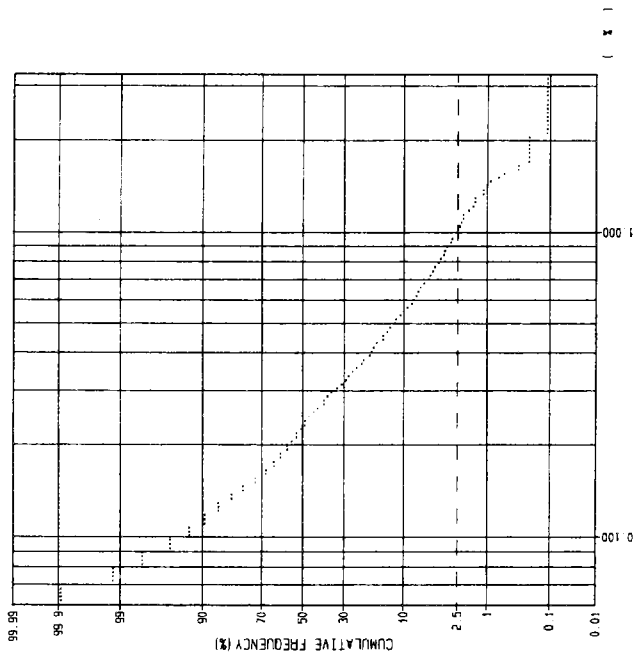
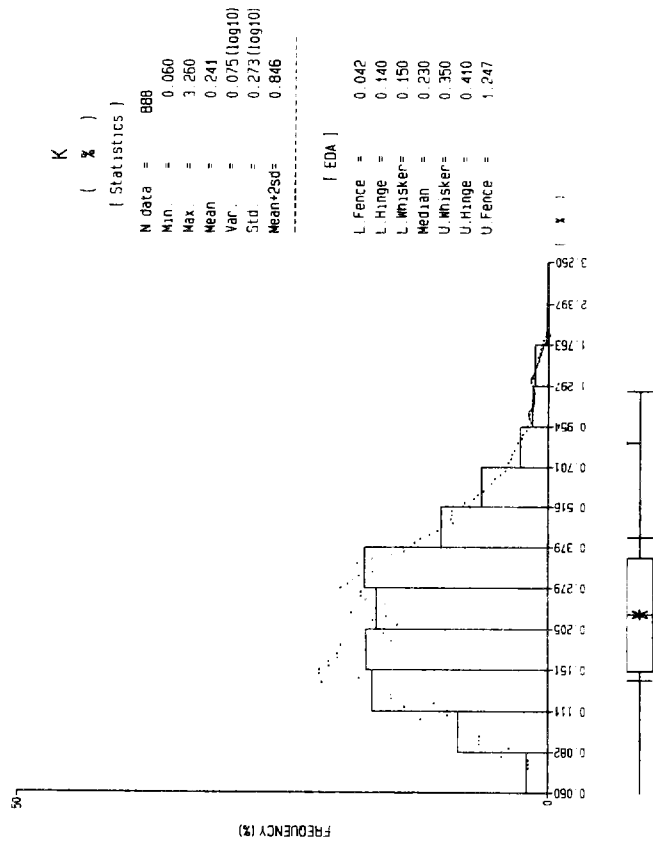
[EDA]

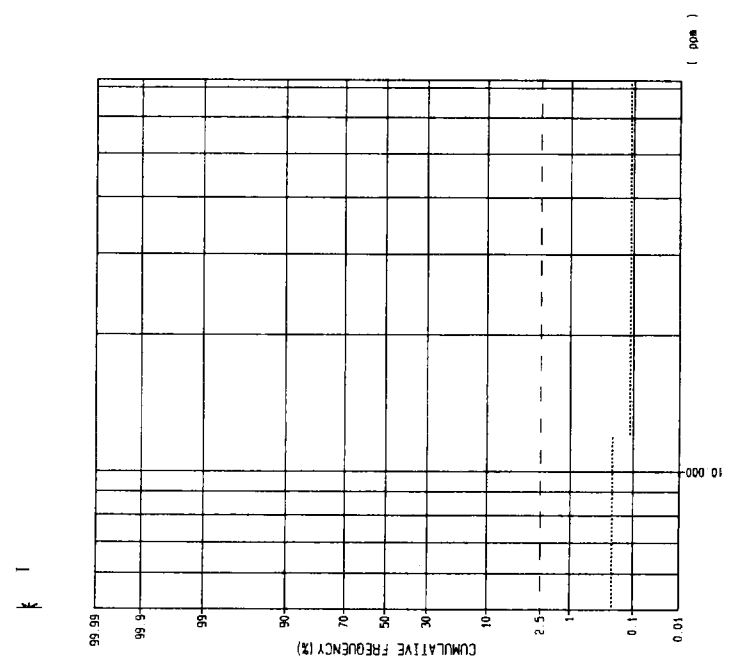
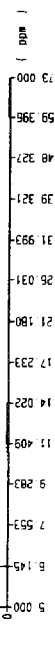
L.Fence = 11.390
 L.Hinge = 25.000
 L.Whisker = 28.000
 Median = 42.000
 U.Whisker = 51.000
 U.Hinge = 54.000
 U.Fence = 125.368



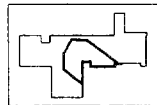
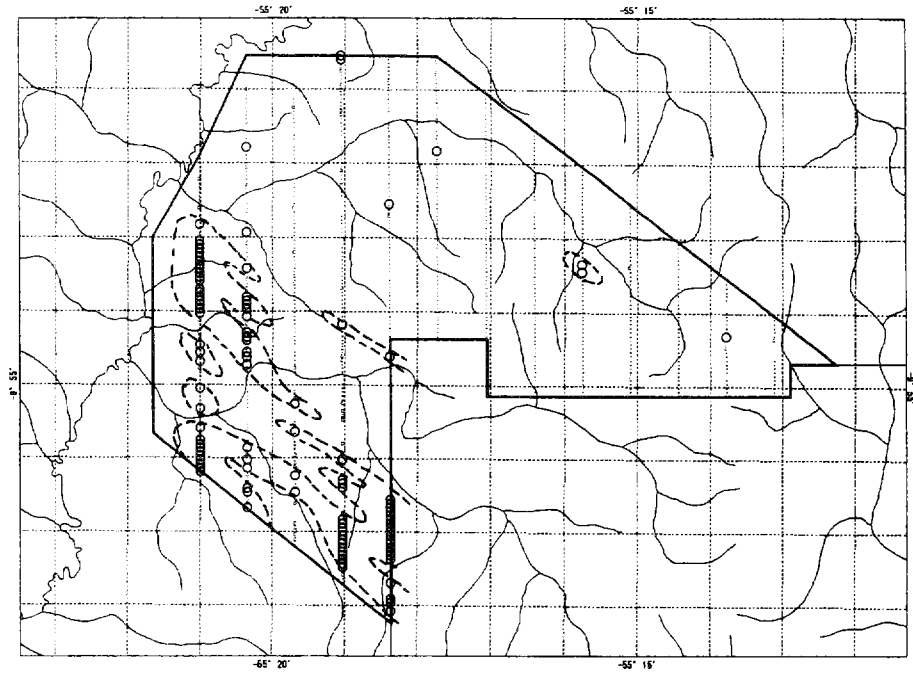








Appendix 39 Distribution map of elements in Block G



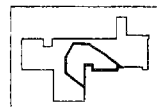
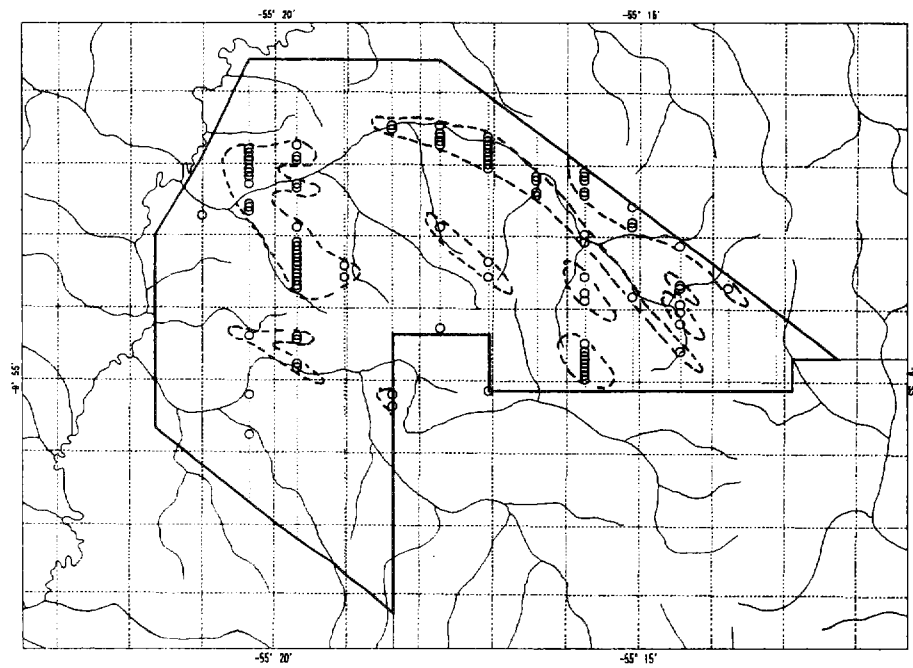
Location of Phase II survey area



LEGEND

- | | |
|-----------------|----------------------|
| Sampling Point | Claim boundary |
| Au(ppb) | Phase II survey area |
| ○ 200 | ⎯ River |
| ◻ 100-200 | |
| ● 05-100 | |
| ⋯ aluminum zone | |

Distribution map of Au anomalies in Block G



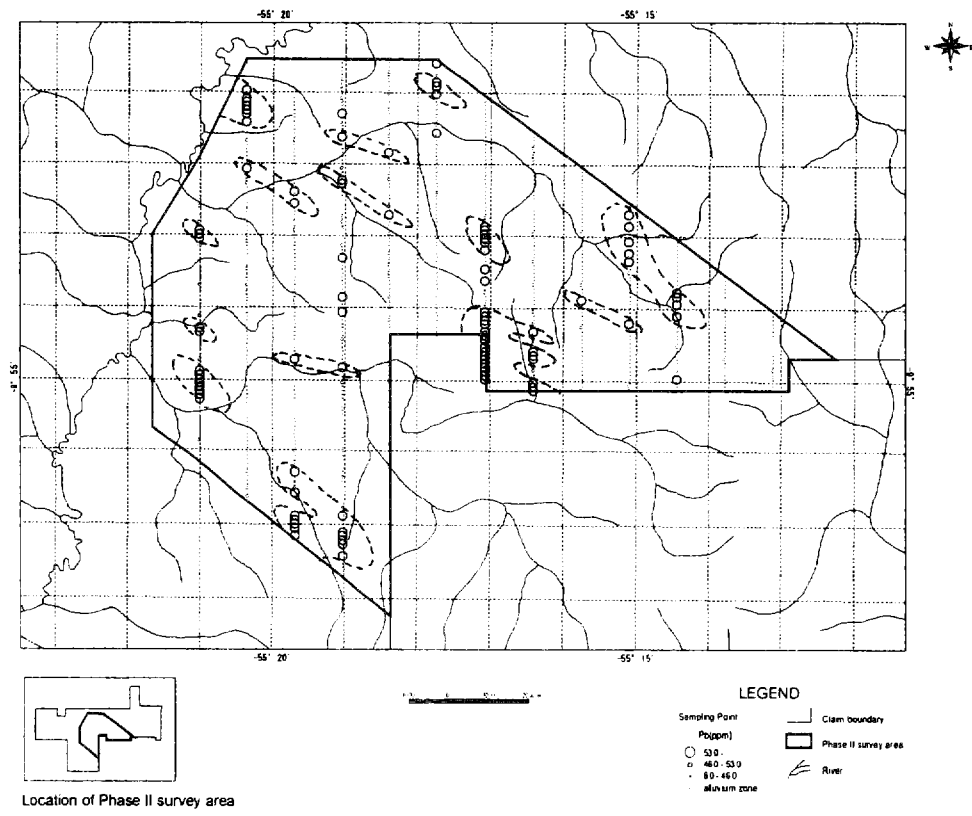
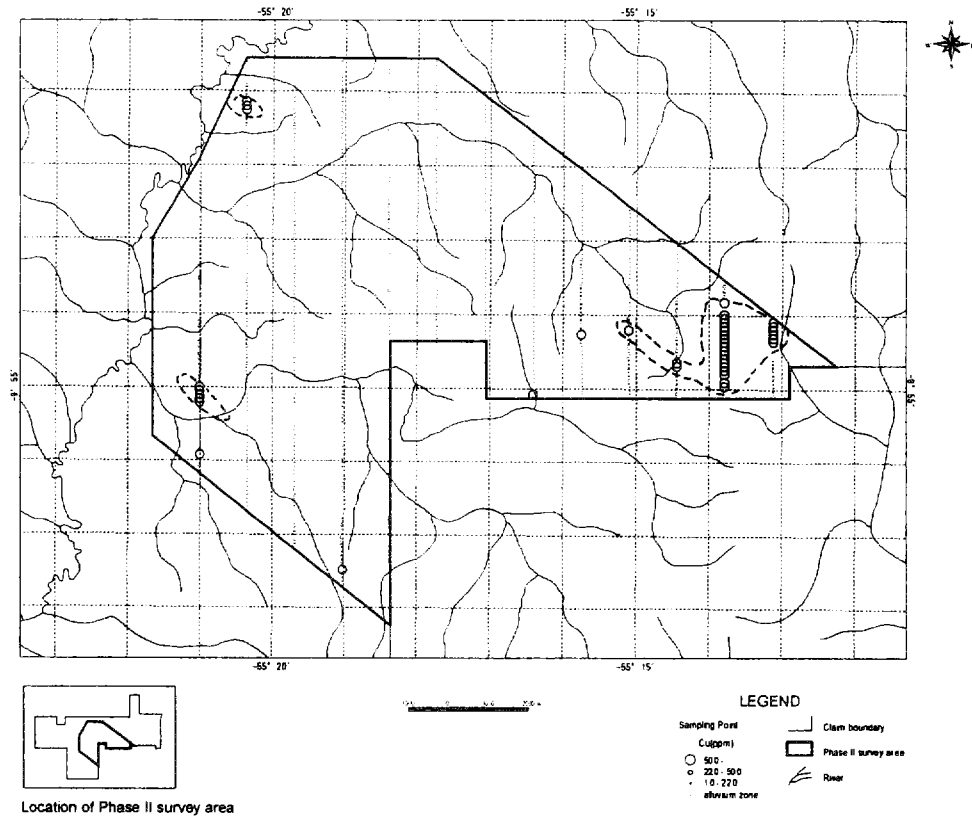
Location of Phase II survey area

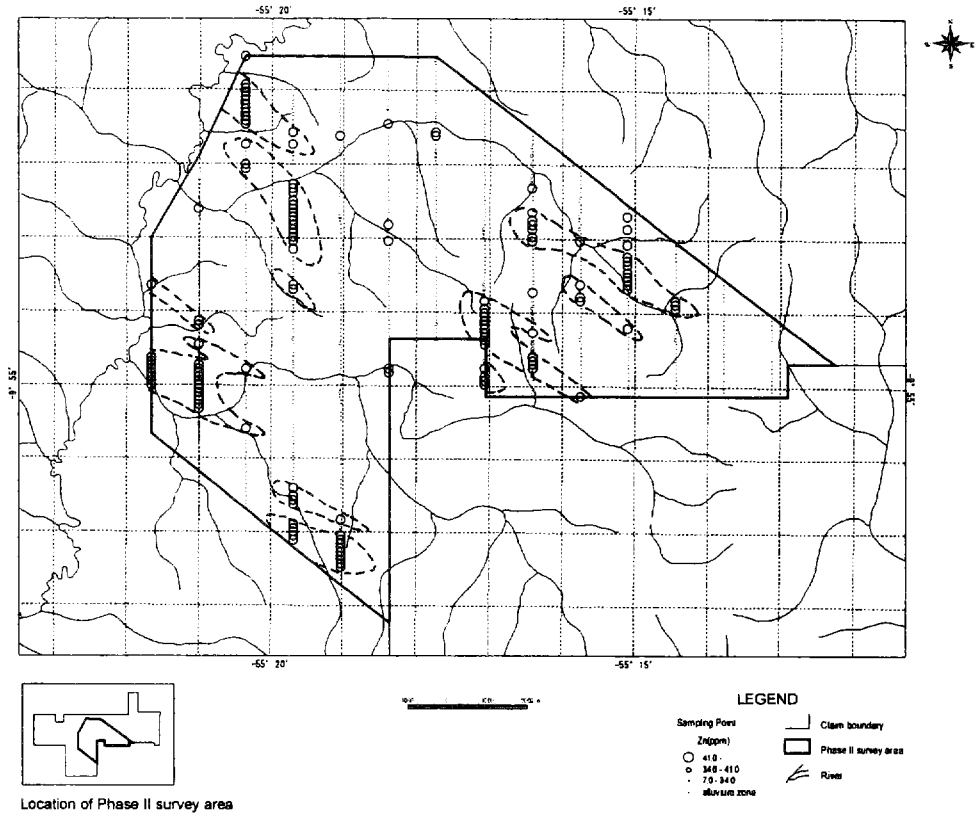


LEGEND

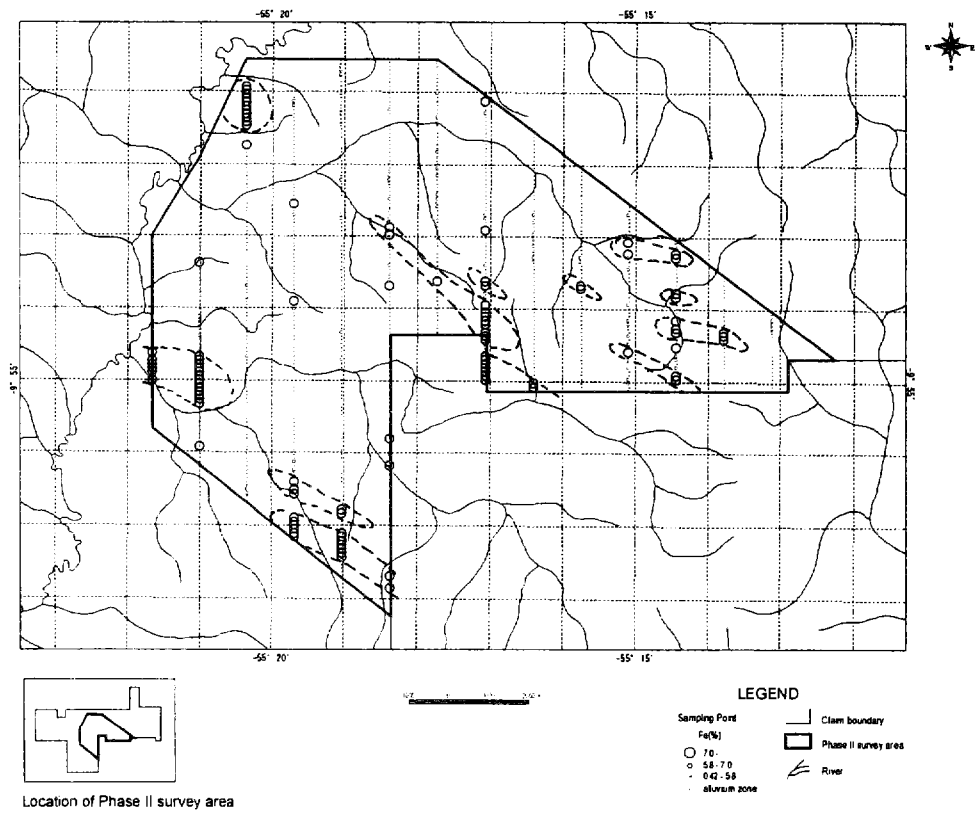
- | | |
|-----------------|----------------------|
| Sampling Point | Claim boundary |
| Ag(ppm) | Phase II survey area |
| ○ 0.2 | ⎯ River |
| ◻ 0.1-0.2 | |
| ⋯ aluminum zone | |

Distribution map of Ag anomalies in Block G

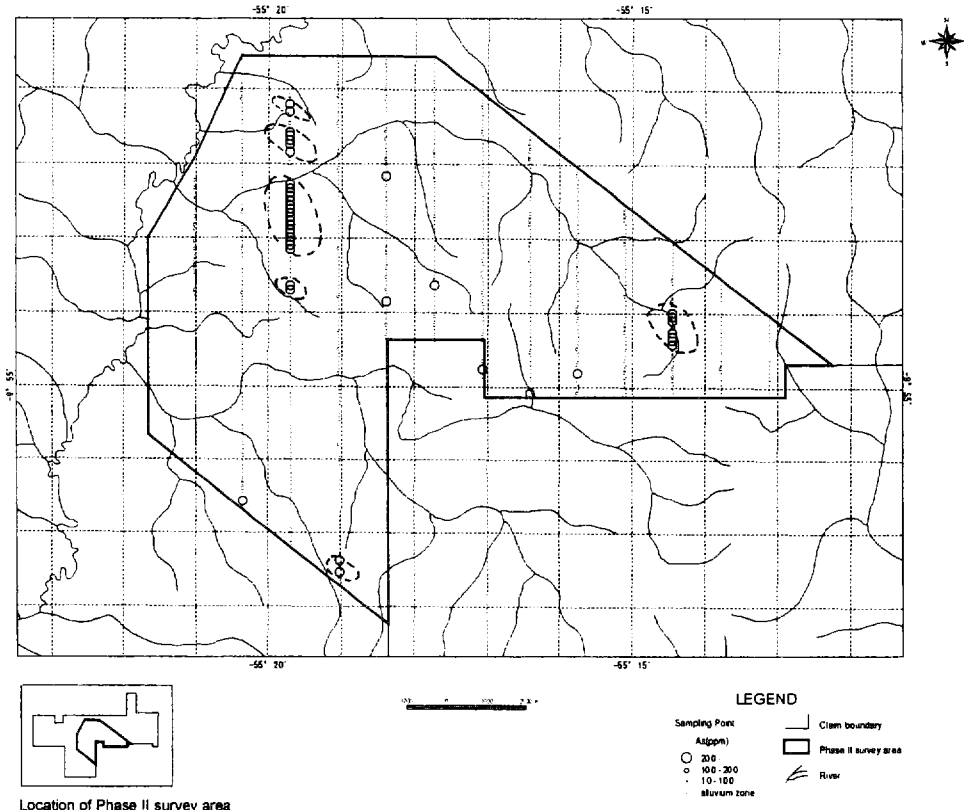




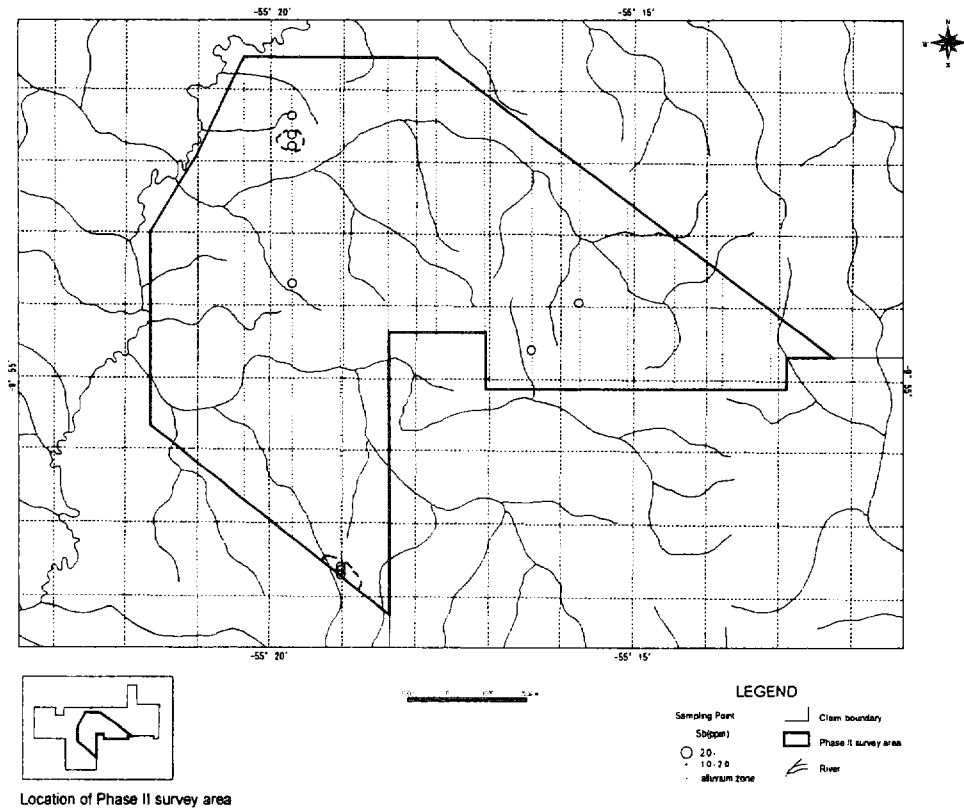
Distribution map of Zn anomalies in Block G



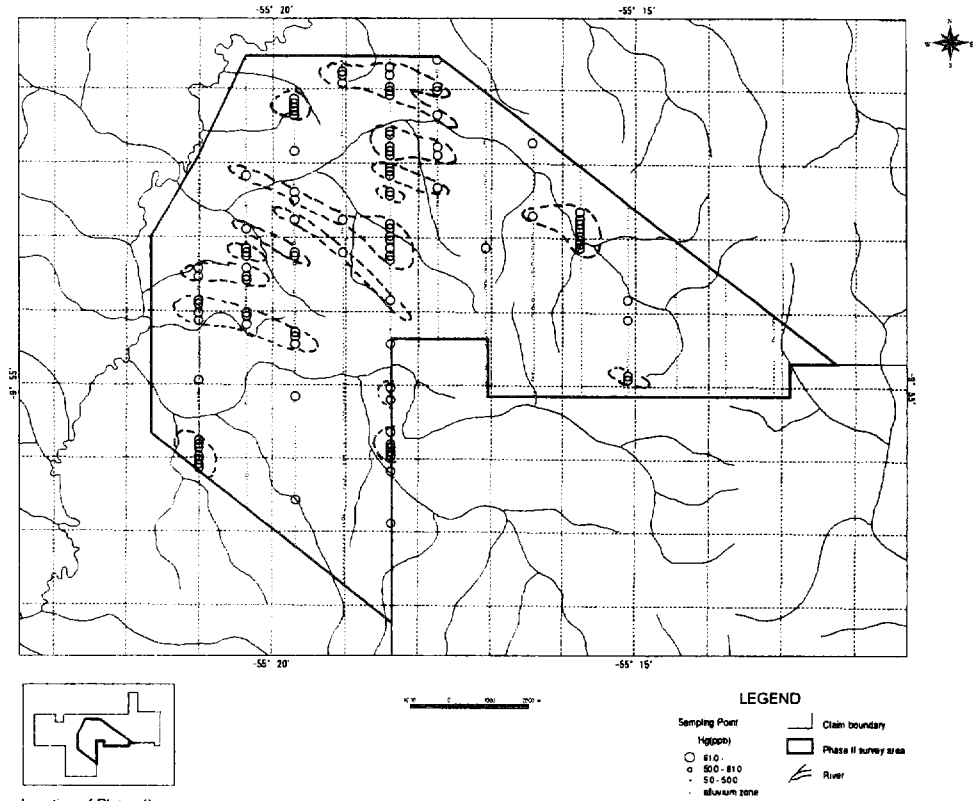
Distribution map of Fe anomalies in Block G



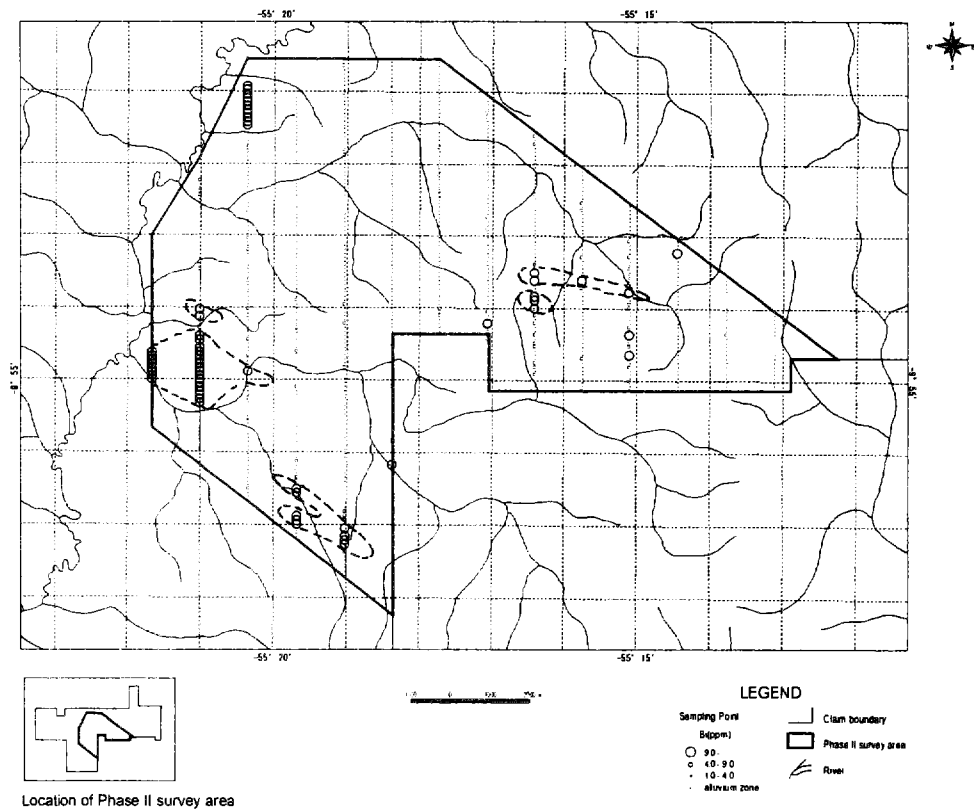
Distribution map of As anomalies in Block G



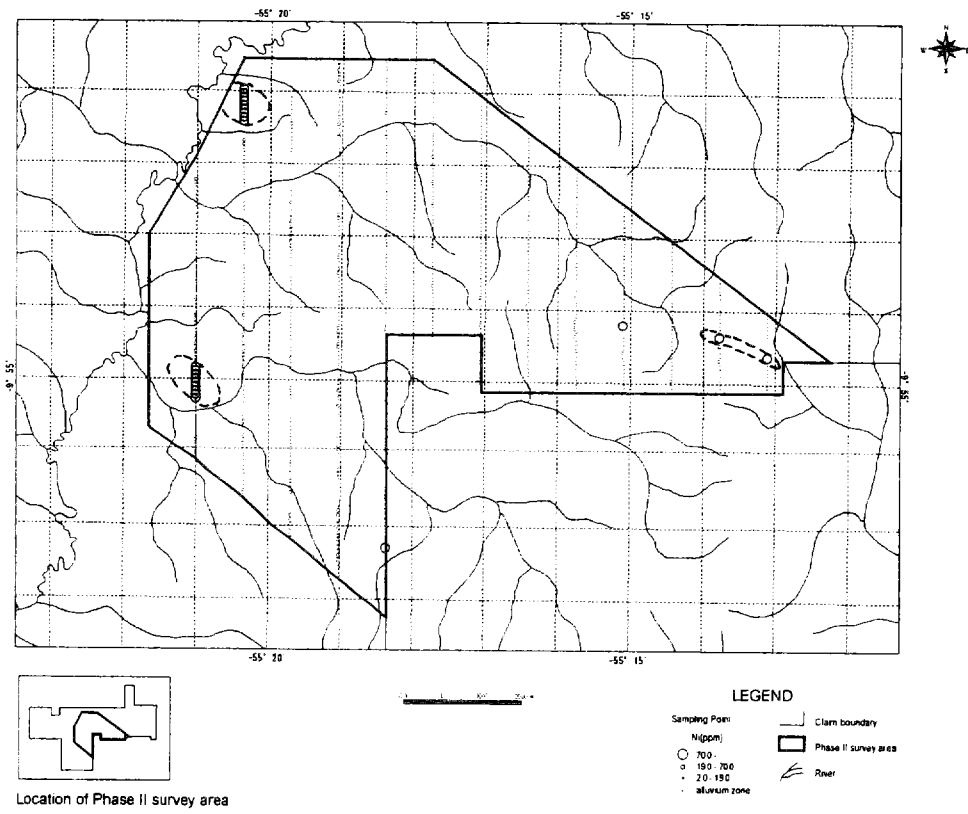
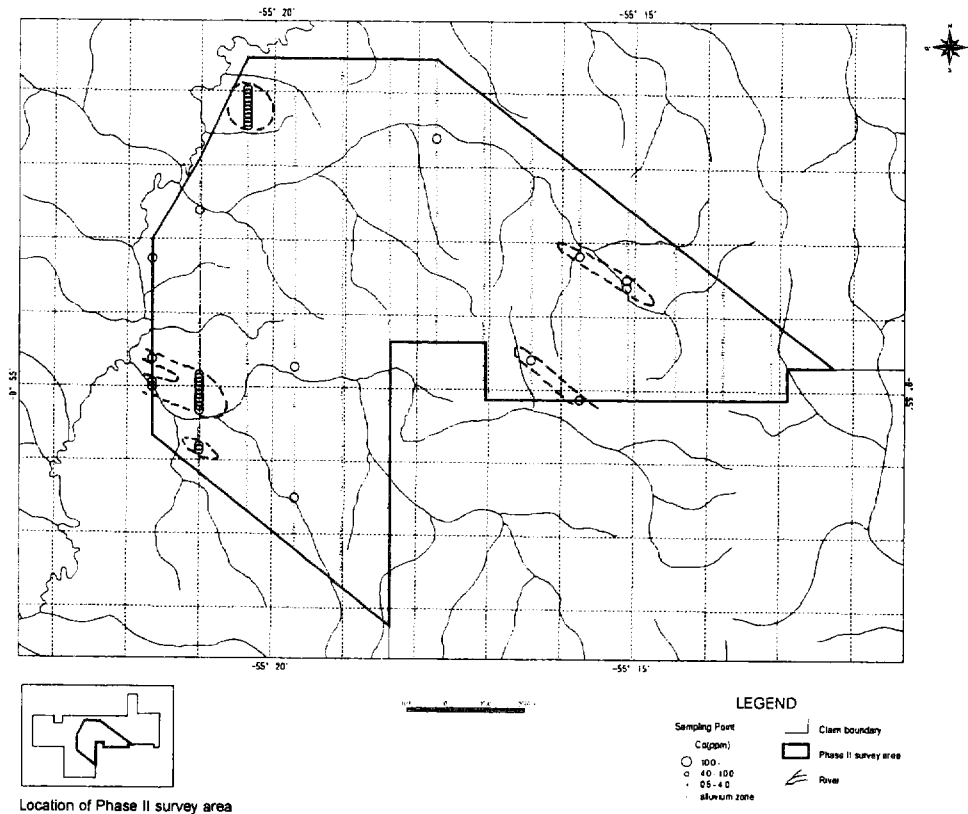
Distribution map of Sb anomalies in Block G

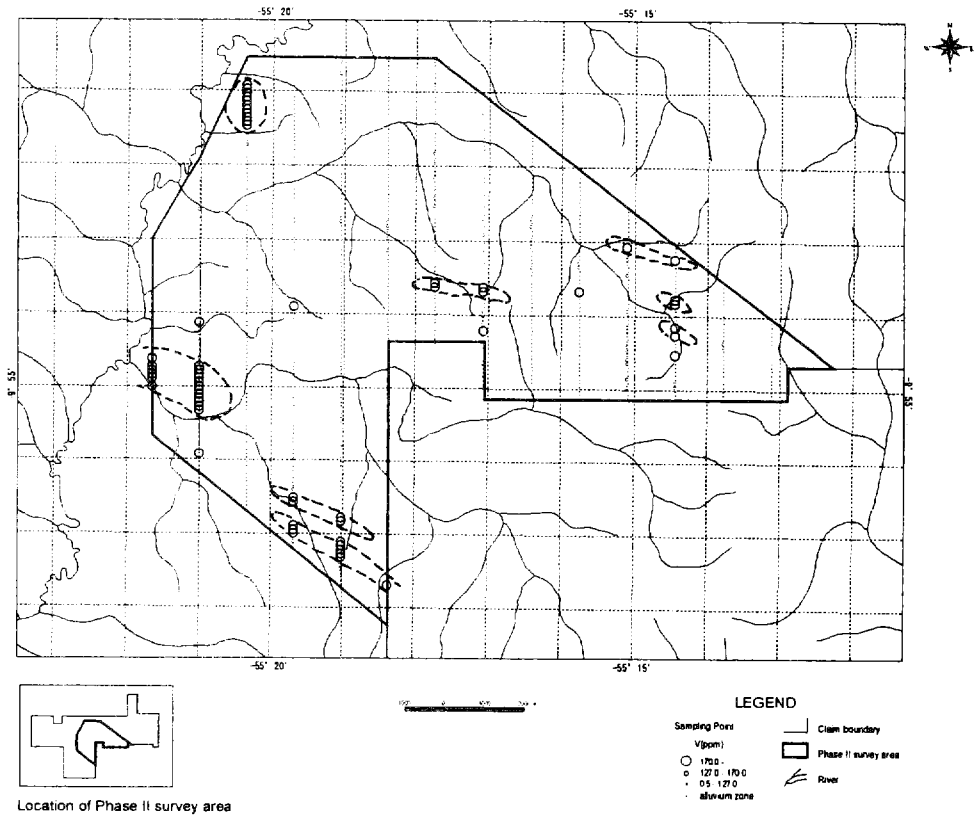


Distribution map of Hg anomalies in Block G

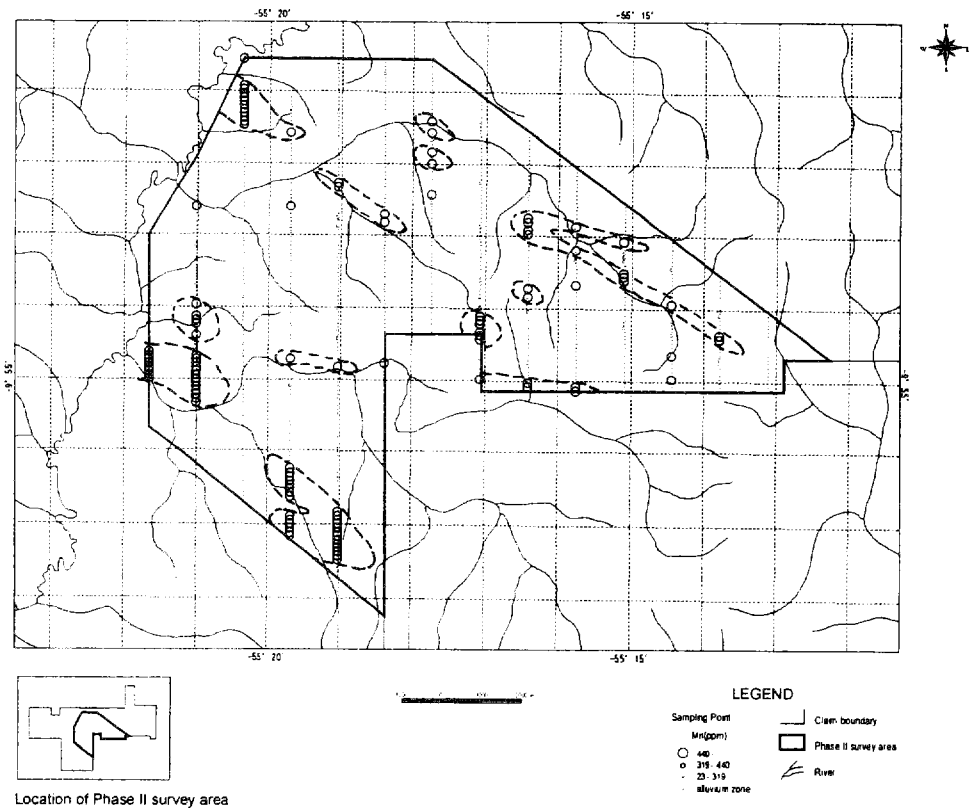


Distribution map of Bi anomalies in Block G

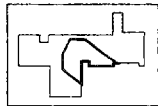
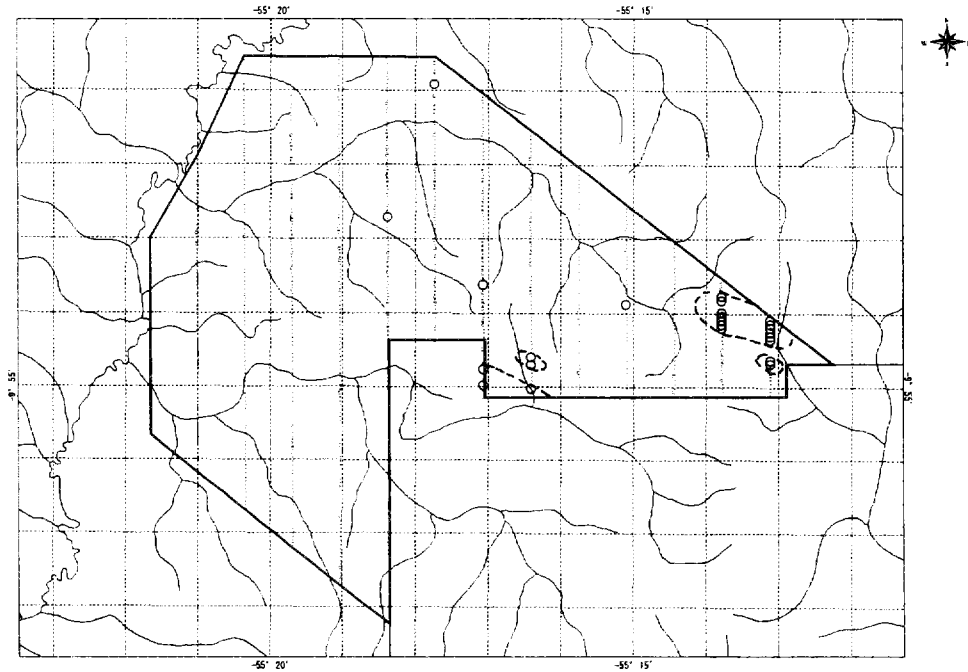




Distribution map of V anomalies in Block G



Distribution map of Mn anomalies in Block G



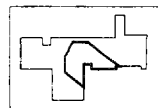
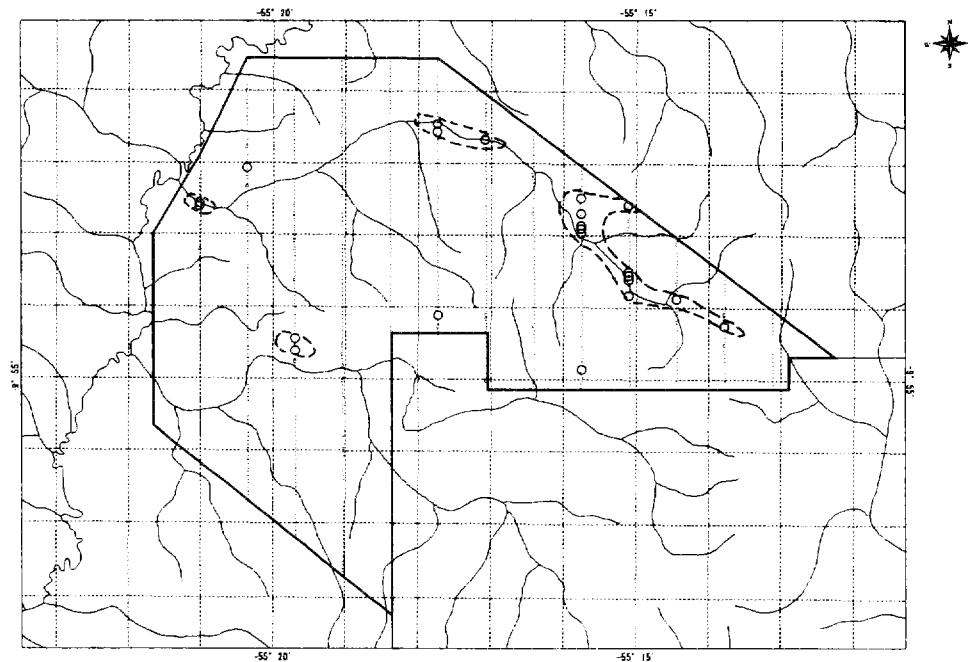
Location of Phase II survey area



LEGEND

- | | |
|---------------------------|----------------------|
| Sampling Point
Mo(ppm) | Claim boundary |
| ○ 30 | Phase II survey area |
| ○ 30-90 | River |
| ○ 90-300 | |
| ○ aluminum zone | |

Distribution map of Mo anomalies in Block G



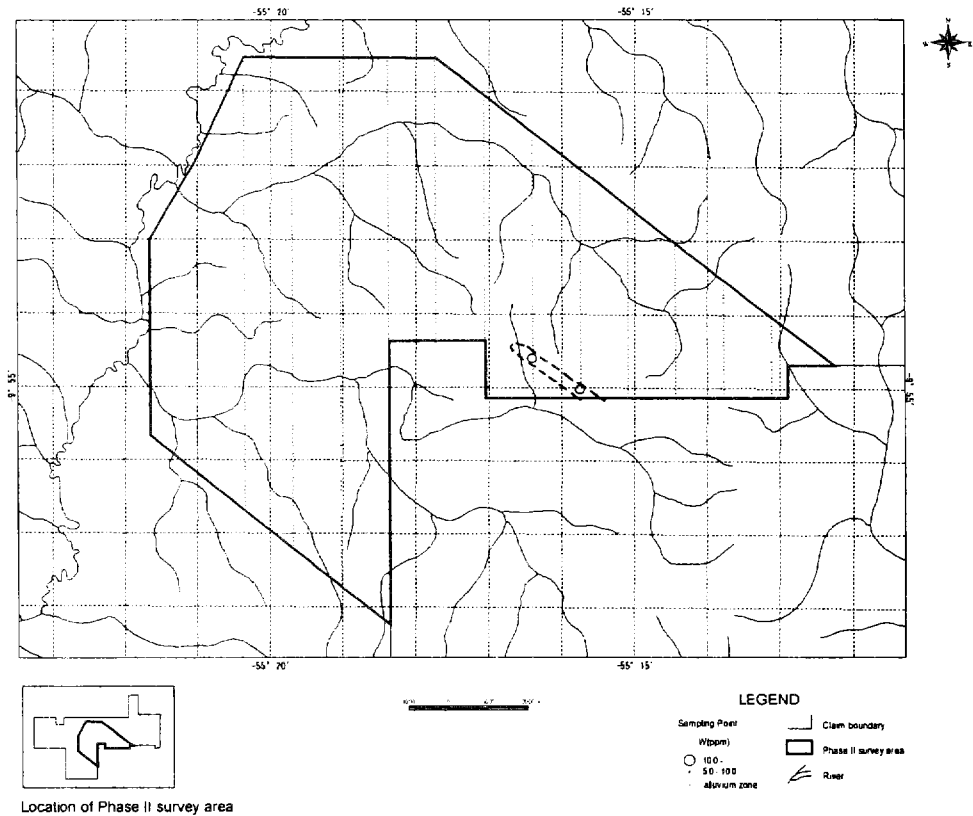
Location of Phase II survey area



LEGEND

- | | |
|------------------------|----------------------|
| Sampling Point
K(%) | Claim boundary |
| ○ 100 | Phase II survey area |
| ○ 0.51 - 1.00 | River |
| ○ 0.05 - 0.51 | |
| ○ aluminum zone | |

Distribution map of K anomalies in Block G



Distribution map of W anomalies in Block G