

APPENDICES

Hornblende Granitoids

Sample No	17	41C	46	110	115	121	126	219	229	244	303
SiO ₂	58.79	59.46	48.99	66.03	58.01	49.03	54.98	51.54	50.98	62.05	65.07
FeO	1.08	0.73	1.24	0.60	1.25	0.91	0.52	0.52	0.23	0.57	0.48
Al ₂ O ₃	18.29	15.91	17.12	15.61	18.26	17.45	12.75	14.91	12.98	16.56	5.49
Fe ₂ O ₃ (T)	6.30	6.51	9.53	4.53	7.18	8.86	8.05	10.95	8.14	5.59	15.88
MnO	0.10	0.11	0.14	0.08	0.15	0.13	0.16	0.17	0.13	0.08	0.09
MgO	1.64	4.28	6.08	1.54	2.30	7.20	6.99	6.93	9.82	2.96	2.17
CaO	3.80	4.79	9.20	3.18	7.36	8.30	7.47	10.00	12.50	4.04	3.96
Na ₂ O	3.32	2.71	2.31	3.85	2.72	2.97	2.20	2.69	2.85	3.24	3.17
K ₂ O	4.17	3.62	1.45	3.97	1.34	2.45	2.97	0.30	0.18	4.14	3.16
P ₂ O ₅	0.35	0.90	0.48	0.25	0.66	0.33	0.37	0.74	0.79	0.35	0.28
LOI	1.80	0.79	1.75	0.68	1.21	1.68	1.78	1.33	0.93	0.96	0.81
Total	99.64	99.81	98.29	100.32	100.44	99.31	98.24	100.08	99.53	100.54	100.56
V	nd	74.83	141.53	nd	113.99	nd	nd	472.27	nd	227.44	213.42
Cr	nd	24.89	18.28	nd	160.44	nd	nd	25.52	nd	139.69	63.24
Ni	nd	13.64	20.50	nd	51.15	nd	nd	156.91	nd	78.06	26.85
Zn	nd	52.69	87.47	nd	49.82	203	117	nd	nd	nd	nd
Ga	nd	21.48	23.17	nd	13.50	19.00	19.00	20.14	nd	23.35	15.64
Sc	nd	9.58	14.75	nd	20.21	nd	nd	18.36	nd	14.25	8.93
Co	nd	51.39	34.23	nd	51.68	nd	nd	75.56	nd	31.00	29.43
Cu	nd	6.97	13.09	nd	25.85	120	102	481.19	nd	197.46	175.89
Rb	nd	99.36	36.98	nd	9.44	75.00	134.00	9.69	nd	213.53	140.08
Sr	nd	452.40	1112.89	nd	171.48	901.00	352.00	579.17	nd	388.19	300.09
Ba	nd	389.54	238.82	nd	35.25	nd	nd	155.34	nd	2496.66	892.33
Pb	nd	2.41	2.41	nd	3.75	nd	4.00	nd	nd	nd	nd
γ	nd	31.63	15.34	nd	10.72	2.00	22.00	7.30	nd	29.53	18.18
Zr	nd	175.16	35.92	nd	27.00	68.00	133.00	26.75	nd	256.62	169.27
Hf	nd	16.09	4.23	nd	3.87	nd	nd	0.80	nd	6.21	4.43
Nb	nd	13.17	3.37	nd	1.53	nd	8.00	3.02	nd	21.42	7.65
La	nd	2.59	1.40	nd	3.49	nd	nd	1.01	nd	2.36	1.93
Th	nd	11.44	1.66	nd	1.33	13.00	11.00	0.78	nd	16.77	10.19
U	nd	1.92	0.33	nd	0.27	nd	12.00	0.20	nd	5.34	2.19
La	nd	27.83	12.77	nd	3.43	nd	nd	9.52	nd	92.99	45.95
Ce	nd	83.46	35.67	nd	9.28	nd	nd	15.30	nd	119.44	80.85
Nd	nd	29.64	16.70	nd	4.34	nd	nd	9.66	nd	49.98	38.71
Sm	nd	3.40	2.44	nd	0.86	nd	nd	2.20	nd	7.42	6.04
Fu	nd	0.50	0.68	nd	0.18	nd	nd	0.92	nd	1.73	1.45
Gd	nd	2.29	1.76	nd	0.68	nd	nd	1.61	nd	7.34	4.67
Dy	nd	3.00	2.10	nd	1.45	nd	nd	1.56	nd	5.55	5.37
Yb	nd	1.97	1.04	nd	1.11	nd	nd	1.00	nd	2.57	3.13

Total iron as Fe₂O₃, major elements in wt%, trace elements in ppm, nd not determined LOI loss on ignition

Biotite Granitoids

Sample No.	38A	41	116	123	127	154	206	234	237	301	304
SiO ₂	71.01	64.05	56.56	63.56	63.91	70.87	71.32	72.67	72.82	76.54	66.37
TiO ₂	0.37	0.67	1.08	0.55	0.80	0.31	0.21	0.18	0.11	0.06	0.42
Al ₂ O ₃	13.79	16.12	18.82	16.13	17.30	13.96	14.25	13.69	14.84	12.86	16.20
Fe ₂ O ₃ (T)	2.60	6.43	6.24	4.96	4.05	2.01	1.92	1.72	1.82	0.71	3.16
MnO	0.04	0.11	0.11	0.09	0.11	0.03	0.03	0.03	0.04	0.02	0.06
MgO	0.45	1.72	2.19	1.50	1.38	0.31	0.47	0.23	0.24	0.01	1.78
CaO	1.45	3.90	7.73	4.26	3.52	1.11	0.66	0.99	1.60	0.26	2.03
Na ₂ O	3.39	3.56	2.51	3.78	4.34	3.44	3.06	3.39	3.51	3.13	2.84
K ₂ O	5.29	3.12	1.91	3.95	4.04	5.26	5.33	4.90	3.63	4.99	4.44
P ₂ O ₅	0.05	0.29	0.79	0.31	0.29	0.06	0.04	0.02	0.06	0.01	0.20
LOI	0.78	0.32	0.92	0.68	0.59	0.98	0.97	0.81	0.71	0.32	0.89
Total	99.19	100.29	98.86	99.77	100.33	98.34	98.26	98.63	99.38	98.91	98.39
V	71.84	nd	nd	61.90	nd	nd	115.54	205.58	nd	57.10	93.41
Cr	32.48	nd	nd	11.53	nd	nd	16.85	15.32	nd	4.36	34.49
Ni	12.21	nd	nd	11.65	nd	nd	47.38	47.21	nd	35.54	38.89
Zn	66.60	71.00	nd	102.84	171.00	34.00	nd	nd	nd	nd	nd
Ga	21.05	17.00	nd	22.60	19.00	17.00	28.63	27.29	nd	19.88	22.86
Sc	9.44	nd	nd	8.80	nd	nd	8.37	5.24	nd	3.49	6.31
Co	42.42	nd	nd	17.24	nd	nd	39.93	32.49	nd	46.82	238.32
Cu	7.64	44.00	nd	6.15	81.00	11.00	192.70	233.92	nd	197.45	20.60
Rb	117.70	123.00	nd	46.83	128.00	125.00	291.47	284.84	nd	341.54	151.93
Sr	398.12	419.00	nd	872.14	580.00	449.00	119.47	88.39	nd	27.61	375.33
Br	525.69	nd	nd	368.17	nd	nd	727.17	541.24	nd	76.03	1562.21
Pb	4.89	13.00	nd	4.66	nd	13.00	nd	nd	nd	nd	nd
Y	32.45	23.00	nd	18.12	14.00	17.00	22.55	28.60	nd	41.28	20.40
Zr	194.66	206.00	nd	40.95	227.00	190.00	189.91	182.04	nd	86.22	220.48
Hf	22.87	nd	nd	5.54	nd	nd	4.54	4.99	nd	3.85	5.80
Nb	12.56	14.00	nd	5.73	14.00	9.00	17.10	17.02	nd	45.30	9.64
Ta	14.99	nd	nd	1.70	nd	nd	3.02	3.36	nd	4.91	1.33
Th	16.13	34.00	nd	4.62	nd	15.00	24.10	36.38	nd	23.01	26.64
U	2.87	5.00	nd	0.93	3.00	1.00	5.23	4.50	nd	33.78	5.21
La	29.17	nd	nd	22.46	nd	nd	60.59	86.71	nd	13.81	62.72
Ce	82.18	nd	nd	66.90	nd	nd	125.87	150.67	nd	34.01	116.79
Nd	32.27	nd	nd	27.93	nd	nd	42.40	60.08	nd	14.99	42.95
Sm	4.66	nd	nd	3.54	nd	nd	9.12	12.14	nd	3.93	6.04
Eu	0.73	nd	nd	1.20	nd	nd	0.80	1.09	nd	0.38	1.83
Gd	2.87	nd	nd	2.37	nd	nd	6.59	8.95	nd	4.53	5.29
Dy	3.92	nd	nd	2.85	nd	nd	4.49	5.98	nd	6.21	4.70
Yb	2.49	nd	nd	1.57	nd	nd	2.39	2.48	nd	5.83	2.72

Total iron as Fe₂O₃, major elements in wt%, trace elements in ppm, nd not determined, LOI loss on ignition

Leucogranitoids

Sample No	9	26	36	50B	106	136	138	139	143	151	152	238	308
SiO ₂	69.98	69.88	75.85	71.22	67.77	74.79	73.32	70.69	75.04	72.69	74.12	70.09	74.35
TiO ₂	0.39	0.34	0.34	0.27	0.53	0.13	0.36	0.50	0.21	0.19	0.14	0.30	0.09
Al ₂ O ₃	14.63	14.34	12.43	14.24	15.93	13.36	13.54	14.42	12.71	14.96	14.01	14.48	13.43
Fe ₂ O ₃ (T)	2.40	2.35	2.65	2.42	2.77	0.65	2.54	3.57	0.97	1.53	1.09	2.36	0.88
MnO	0.04	0.05	0.08	0.06	0.08	0.05	0.07	0.07	0.01	0.04	0.04	0.05	0.03
MgO	0.27	0.62	0.20	0.17	0.83	0.01	0.37	0.71	0.01	0.33	0.03	0.58	0.01
CaO	1.04	1.04	0.53	0.81	2.90	1.02	0.40	1.97	0.25	2.37	1.13	1.04	0.56
Na ₂ O	3.33	3.07	3.58	3.63	4.24	4.51	4.16	3.95	4.46	3.23	3.14	3.23	3.30
K ₂ O	5.54	5.43	4.66	4.82	4.20	4.44	4.90	3.95	6.84	3.44	4.41	4.99	5.03
P ₂ O ₅	0.09	0.08	0.01	0.07	0.06	0.01	0.01	0.07	0.01	0.06	0.01	0.08	0.01
LOI	0.97	0.93	0.35	0.59	0.61	0.58	0.43	0.39	0.27	0.53	0.47	0.93	0.59
Total	98.68	98.13	100.68	98.30	99.92	99.55	100.10	100.29	100.78	99.37	98.59	98.13	98.28
V	13.51	nd	nd	6.99	nd	nd	nd	nd	nd	25.10	nd	148.67	95.23
Cr	7.20	nd	nd	5.30	nd	nd	nd	nd	nd	14.18	nd	10.36	8.00
Ni	9.09	nd	nd	8.69	nd	nd	nd	nd	nd	7.63	nd	34.85	34.93
Zn	46.78	nd	nd	50.83	113.00	86.00	268.00	330.00	139.00	36.00	62.00	nd	nd
Ga	18.03	nd	nd	23.74	17.00	17.00	19.00	20.00	18.00	18.03	16.00	17.72	24.72
Sc	2.67	nd	nd	4.88	nd	nd	nd	nd	nd	2.39	nd	7.18	5.30
Co	89.43	nd	nd	46.83	nd	nd	nd	nd	nd	23.75	nd	35.00	40.52
Cu	4.70	nd	nd	4.91	52.00	13.00	120.00	165	41.00	3.23	5.00	202.63	216.06
Rb	152.75	nd	nd	223.42	138.00	195.00	167.00	147.00	232.00	90.61	164.00	184.26	436.64
Sr	17.05	nd	nd	54.53	405.00	198.00	104.00	240.00	361.00	414.38	220.00	154.72	37.20
Ba	94.20	nd	nd	202.05	nd	nd	nd	nd	nd	379.60	nd	1288.07	110.02
Pb	14.63	nd	nd	5.49	16.00	13.00	nd	nd	nd	5.42	nd	nd	nd
Y	69.29	nd	nd	44.77	19.00	30.00	27.00	32.00	22.00	15.00	21.00	25.02	35.80
Zr	442.95	nd	nd	302.06	292.00	112.00	385.00	285.00	137.00	98.73	100.00	216.60	158.01
Hf	77.33	nd	nd	29.91	nd	nd	nd	nd	nd	13.36	nd	5.36	7.26
Nb	28.16	nd	nd	19.10	18.00	16.00	31.00	29.00	5.00	7.54	7.00	11.39	22.40
Ta	165.31	nd	nd	2.98	nd	nd	nd	nd	nd	9.73	nd	2.30	4.53
Th	29.14	nd	nd	23.48	19.00	24.00	nd	25.00	4.00	9.78	5.00	12.37	40.33
U	4.89	nd	nd	4.54	9.00	6.00	8.00	8.00	6.00	1.83	5.00	3.53	52.29
La	70.36	nd	nd	43.24	nd	nd	nd	nd	nd	19.13	nd	73.13	27.78
Ce	144.30	nd	nd	137.69	nd	nd	nd	nd	nd	48.20	nd	134.84	64.84
Nd	50.01	nd	nd	43.18	nd	nd	nd	nd	nd	15.29	nd	50.03	28.05
Sm	10.85	nd	nd	4.75	nd	nd	nd	nd	nd	2.31	nd	7.86	6.75
Eu	0.84	nd	nd	0.23	nd	nd	nd	nd	nd	0.34	nd	1.60	0.35
Gd	5.96	nd	nd	3.05	nd	nd	nd	nd	nd	1.34	nd	7.29	5.61
Dy	6.84	nd	nd	3.97	nd	nd	nd	nd	nd	1.55	nd	4.69	5.19
Yb	4.01	nd	nd	3.30	nd	nd	nd	nd	nd	1.30	nd	4.53	4.78

Total iron as Fe₂O₃, major elements in wt%, trace elements in ppm, nd not determined, LOI loss on ignition

Mafic Magmatic Enclaves

Appendix - I Contd

Sample No.	X1	X3	X4	X7	X8	240	241	242	243	245	246	247
SiO ₂	61.57	63.26	64.76	63.10	60.84	50.07	49.95	55.09	54.80	53.16	59.59	59.30
TiO ₂	0.74	0.88	0.57	0.72	0.81	3.98	0.84	2.19	0.90	0.87	1.06	1.48
Al ₂ O ₃	16.25	15.78	15.85	16.03	16.44	12.87	12.15	13.20	13.86	14.18	16.59	15.46
Fe ₂ O ₃ (T)	6.68	7.90	6.57	5.36	6.58	12.22	9.45	9.72	5.92	10.07	6.50	4.75
MnO	0.23	0.24	0.19	0.23	0.20	0.15	0.15	0.16	0.10	0.14	0.10	0.10
MgO	3.09	2.67	2.03	2.59	3.34	8.72	10.33	7.33	7.50	7.34	3.59	4.76
CaO	4.88	3.80	4.07	4.34	4.68	2.83	8.65	1.15	5.39	8.27	4.68	5.10
Na ₂ O	2.47	2.35	2.95	2.91	2.56	2.82	2.94	2.58	2.93	2.86	3.94	2.89
K ₂ O	3.87	3.12	2.61	3.96	3.89	5.89	1.71	7.56	5.38	1.41	4.12	2.95
P ₂ O ₅	0.72	0.55	0.22	0.64	0.67	1.00	0.60	0.59	0.74	0.41	0.48	0.72
LOI	0.31	0.29	0.49	0.53	0.49	0.42	1.89	0.54	0.97	0.43	0.31	0.82
Total	100.81	100.84	100.31	100.41	100.50	100.97	98.66	100.11	98.49	99.14	100.96	98.33
V	220.24	248.78	188.09	170.65	188.61	305.58	nd	177.12	233.60	nd	nd	nd
Cr	233.57	267.89	43.35	293.80	156.17	128.37	nd	20.88	522.79	nd	nd	nd
Ni	75.71	78.78	67.03	76.33	83.51	114.96	nd	56.28	175.17	nd	nd	nd
Zn	201.69	328.26	411.74	547.13	292.62	nd	nd	nd	nd	nd	nd	nd
Ga	20.00	23.00	20.00	24.00	22.00	29.83	nd	31.92	27.55	nd	nd	nd
Sc	nd	nd	nd	nd	nd	21.62	nd	15.66	19.78	nd	nd	nd
Co	33.82	39.15	25.94	26.55	30.35	37.75	nd	41.35	38.70	nd	nd	nd
Cu	77.00	125.00	185.00	215.00	139.00	192.39	nd	194.77	203.32	nd	nd	nd
Rb	249.00	320.00	130.00	313.00	257.00	639.99	nd	475.42	296.41	nd	nd	nd
Sr	318.00	305.00	389.00	336.00	364.00	107.03	nd	117.69	429.53	nd	nd	nd
Ba	nd	nd	nd	nd	nd	329.17	nd	1754.29	1772.55	nd	nd	nd
Pb	35.07	47.00	67.91	95.69	48.47	nd	nd	nd	nd	nd	nd	nd
Y	33.00	46.00	27.00	43.00	33.00	68.13	nd	63.15	30.00	nd	nd	nd
Zr	216.00	273.00	183.00	262.00	183.00	140.46	nd	2004.25	842.44	nd	nd	nd
Hf	nd	nd	nd	nd	nd	3.45	nd	40.50	18.06	nd	nd	nd
Nb	18.00	27.00	21.00	27.00	16.00	79.37	nd	42.67	27.67	nd	nd	nd
Ta	nd	nd	nd	nd	nd	2.87	nd	2.69	1.40	nd	nd	nd
Th	nd	nd	nd	6.00	6.00	2.46	nd	55.97	20.23	nd	nd	nd
U	8.00	17.00	10.00	18.00	10.00	3.73	nd	10.24	8.07	nd	nd	nd
La	nd	nd	nd	nd	nd	59.30	nd	160.60	98.29	nd	nd	nd
Ce	nd	nd	nd	nd	nd	110.17	nd	256.15	210.60	nd	nd	nd
Nd	nd	nd	nd	nd	nd	60.49	nd	127.46	88.63	nd	nd	nd
Sm	nd	nd	nd	nd	nd	12.13	nd	18.63	12.19	nd	nd	nd
Eu	nd	nd	nd	nd	nd	2.21	nd	1.73	3.30	nd	nd	nd
Gd	nd	nd	nd	nd	nd	10.60	nd	16.45	11.03	nd	nd	nd
Dy	nd	nd	nd	nd	nd	9.39	nd	14.36	5.63	nd	nd	nd
Yb	nd	nd	nd	nd	nd	5.47	nd	12.60	2.62	nd	nd	nd

Total iron as Fe₂O₃, major elements in wt%, trace elements in ppm, nd not determined, LOI loss on ignition

APPENDIX - II

CIPW normative values and important ratios of Bundelkhand granitoids and mafic magmatic enclaves

Sample No.	Hornblende Granitoids												
	17	41C	46	110	115	121	126	219	229	244	303		
Q	11 82	13 28	1 38	18 51	17 32	-	6 08	4 11	-	13 14	21 43		
Or	24 64	21 39	8 57	23 46	7 92	14 48	17 55	1 77	1 06	24 47	18 67		
ab	28 09	22 93	19 55	32 58	23 02	24 59	18 62	22 76	24 12	27 42	26 82		
an	16 57	17 88	32 06	13 59	32 20	27 05	16 14	27 72	22 09	17 76	17 82		
C	2 24	0 98	-	-	0 53	-	-	-	-	0 24	0 72		
di	-	-	8 46	0 46	-	9 65	14 91	13 87	27 83	-	-		
hy	8 68	16 06	18 63	7 23	11 01	-	17 58	20 72	13 48	12 07	10 19		
il	2 05	1 39	2 36	1 14	2 37	1 73	0 99	0 99	0 44	1 08	0 91		
ap	0 81	2 09	1 11	0 58	1 53	0 76	0 86	1 71	1 83	0 81	0 65		
mt	2 46	2 55	3 73	1 77	2 81	3 47	3 15	4 29	3 19	2 19	2 15		
A/CNK	1 13	1 0	0 80	1 0	0 97	0 85	0 63	0 65	0 45	1 0	1 0		
K/Rb	-	302	325	-	1178	271	184	283	-	161	187		
Rb/Sr	-	0 21	0 03	-	0 05	0 08	0 38	0 01	-	0 55	0 46		
Y/Nb	-	2 40	4 55	-	7 00	-	2 75	2 41	-	1 37	2 37		
Ce _N /Yb _N	-	10 98	8 89	-	2 16	-	-	3 96	-	12 04	6 69		
Gd _N /Yb _N	-	0 94	1 37	-	0 49	-	-	1 30	-	2 31	1 20		
Eu/Eu*	-	0 54	1 00	-	0 71	-	-	1 49	-	0 71	0 83		
Yb _N	-	4 37	4 19	-	4 47	-	-	4 03	-	10 36	12 62		

Biotite Granitoids

Sample No.	38A	41	116	123	127	154	206	234	237	301	304
Q	26.50	18.83	17.05	14.88	13.11	27.36	30.39	31.13	34.12	38.40	25.26
Or	31.26	18.44	11.29	23.34	23.88	31.09	31.50	28.96	21.45	29.49	26.24
ab	28.69	30.12	21.24	31.99	36.72	29.11	25.89	28.69	29.70	26.49	24.03
an	6.79	17.45	33.19	15.38	15.57	5.11	3.01	4.78	7.55	1.22	8.76
C	-	0.49	0.46	-	0.08	0.73	2.34	1.06	2.37	1.86	3.51
di	0.07	-	-	3.10	-	-	-	-	-	-	-
hy	3.11	9.69	5.45	6.34	6.30	2.29	2.76	2.03	2.29	0.67	6.97
mt	1.01	2.52	0.77	1.94	1.58	0.78	0.75	0.67	0.71	0.28	1.23
pl	0.70	1.27	2.05	1.04	1.52	0.59	0.40	0.34	0.21	0.11	0.80
ap	0.12	0.67	1.83	0.72	0.67	0.14	0.09	0.05	0.14	0.02	0.46
A/CNK	1.08	1.07	0.94	0.88	0.94	1.18	1.30	1.18	1.4	1.15	1.36
K/Rb	373	210	-	700	262	349	152	143	-	121	242
Rb/Sr	0.29	0.29	-	0.05	0.22	0.27	2.43	3.22	-	12.37	0.40
Y/Nb	2.58	1.60	-	3.16	1.0	1.8	1.31	1.68	-	0.91	2.11
Ce _N /Yb _N	8.55	-	-	11.04	-	-	13.65	15.74	-	1.51	11.13
Gd _N /Yb _N	0.93	-	-	1.22	-	-	2.23	2.92	-	0.62	1.57
Eu/Eu*	0.61	-	-	1.26	-	-	0.31	0.31	-	0.27	0.98
Yb _N	10.04	-	-	6.33	-	-	9.63	10.00	-	23.50	10.96

Leucogranitoids

Sample No.	9	26	36	50B	106	136	138	139	143	151	152	238	308
Q	26 21	27.48	34.79	30.54	19.26	29.56	28.06	26.23	27.96	34.89	36.12	28.46	34.36
Or	32 74	32.09	27.54	28.49	24.82	26.24	28.96	23.34	40.42	20.33	26.06	29.49	29 73
ab	28 18	25 98	30 29	30 72	35.88	38 16	35 20	33 42	27 30	27 33	26 57	27 33	27 92
an	4 57	4 64	2 56	-	12 03	3 10	1 92	9 32	-	11 37	5 54	4 64	2 71
C	1 48	1 71	0 56	3 11	-	-	0 69	0 23	-	1 76	2 04	2 07	1 56
di	-	-	-	-	1 62	1 03	-	-	1 04	-	-	-	-
hy	2 47	3 38	2 69	2 47	3 26	-	2 95	4 59	0 32	1 79	1 00	3 36	0 80
mt	0 94	0 91	1 04	0 94	1 09	0 26	1 00	1 39	-	0 78	0 42	0 93	0 35
ul	0 74	0 65	0 65	0 51	1 01	0 25	0 68	0 95	0 40	0 36	0 27	0 57	0 17
ap	0 21	0 19	0 02	0 16	0 14	0 02	0 02	0 16	0 02	0 14	0 02	0 19	0 02
A/CNK	1 27	1 4	1 21	1 18	1 00	1 08	1 11	1 07	0 83	1 16	1 18	1 27	1 19
K/Rb	301	-	-	179	253	189	244	223	244	315	209	225	96
Rb/Sr	8 95	-	-	4 09	0 34	0 98	1 60	0 61	0 64	0 21	0 74	1 19	11 73
Y/Nb	2 46	-	-	2 34	1 05	1 87	0 87	1 10	4 4	1 98	3 00	2 19	1 59
Ce _N /Yb _N	9 33	-	-	10 81	-	-	-	-	-	9 58	-	7 71	3 51
Gd _N /Yb _N	1 20	-	-	0 74	-	-	-	-	-	0 83	-	1 30	0 95
Eu/Eu*	0 31	-	-	0 61	-	-	-	-	-	0 58	-	0 64	0 17
Yb _{ii}	4 03	-	-	13 30	-	-	-	-	-	5 24	-	18 26	19 27

Mafic Magmatic Enclaves

Sample No.	X1	X3	X4	X7	X8	240	241	242	243	245	246	247
Q	15 82	22 93	22 92	16 88	15 11	-	-	-	-	3 24	5 69	14 13
Or	22 87	18 44	15 42	23 40	22 99	34 81	10 11	44 68	31 79	8 33	24 35	17 43
ab	20 90	19 89	24 96	24 62	21 66	23 86	24 88	21 83	24 79	24 20	33 34	24 45
an	19 51	15 26	18 75	17 35	17 53	5 06	14 91	1 85	8 78	21 69	15 42	20 50
C	0 85	2 95	1 30	0 60	1 59	-	-	0 09	-	-	-	-
di	-	-	-	-	-	1 95	19 28	-	10 45	13 47	3 79	0 08
il	1 41	1 67	1 08	1 37	1 54	7 56	1 60	4 16	1 71	1 65	2 01	2 81
ap	1 67	1 27	0 51	1 48	2 02	2 32	1 39	1 37	1 71	0 95	1 11	1 67
ol	-	-	-	-	-	18 11	11 36	8 76	6 76	-	-	-
mt	1 45	1 73	1 44	1 16	1 44	4 78	3 70	3 80	2 32	3 94	2 55	1 86
hy	15 46	15 75	12 89	12 56	15 77	1 20	8 86	12 32	8 77	20 50	11 92	14 23
Ce _N /Yb _N	-	-	-	-	-	5 22	-	5 26	20 83	-	-	-
Gd _N /Yb _N	-	-	-	-	-	1 57	-	1 05	3 41	-	-	-
Eu/Eu*	-	-	-	-	-	0 59	-	0 30	0 86	-	-	-