

MAFIC MACROCRYSTS OF ULTRABASIC ALKALINE DIKES FROM THE MANTIQUEIRA RANGE, SE BRAZIL:
TRACERS OF A COMPLEX PLUMBING SYSTEM

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Supplementary material B - Whole-rock compositions of the ultrabasic alkaline dikes from the Mantiqueira range. Data from selected dikes were compiled from Azzone et al. (2018), except for sample MT-75A (in blue, this work). Mg# = 100x[(Mgmol)/(FeTmol+Mgmol)]. Abbreviations: ne, normative nepheline; ol, normative olivine.

	Dike							
	MT-64A	MT-74F	MT-74E	MT-73C	MT-74B	MT-68F	MT-75	MT-79A
(wt.%)								
SiO ₂	42.6	42.88	41.59	41.51	41.49	42.47	37.75	38.62
TiO ₂	2.15	2.15	2.3	3.28	2.55	2.88	3.8	3.94
Al ₂ O ₃	12.57	12.4	13.41	15.42	14.51	15.47	11.25	9.7
Fe ₂ O ₃ ^T	11.44	11.35	11	11.37	10.84	11.16	12.09	12.53
MnO	0.176	0.171	0.174	0.165	0.151	0.187	0.206	0.17
MgO	10.47	10.67	10.22	5.25	7.11	5.11	8.17	11.09
CaO	10.11	10.38	10.35	10.66	10.96	9.8	11.42	11.74
Na ₂ O	3.11	2.56	4.07	3.34	3.87	5.49	1.57	2
K ₂ O	1.88	2.09	1.74	2.77	1.99	1.88	3.87	2.53
P ₂ O ₅	1.25	1.31	0.993	0.729	1.12	1.14	1.3	1.02
LOI	2.86	2.58	2.76	4.69	4.04	3.21	8.72	5.53
Total	98.62	98.54	98.61	99.19	98.64	98.8	100.15	98.87
Mg#	73.9	74.2	74.6	59.6	67.5	60.6	67.3	72.4
ne	8.62	6.07	16.58	13.54	14.90	19.55	7.94	9.91
ol	16.03	16.57	13.57	3.84	7.66	3.33	8.28	12.55
(ppm)								
F		628		932	588	842	1142	1366
S			1384	1369	1565	2244	904	1328
Cl	65.2					874		
Sc	27	25.8	21.9	25.2	21.9	18.7	27	24.5
V	187	181	201	247	237	203	279	253
Cr	293	321	284	51.5	173		272	487
Co	42.7	45.5	39.4	33.3	36.2	28.8	46	50.9
Cu	82.2	62.9	49.2	41.4	49.9	58.3	44	54.8
Ni	248	242	227	34.3	77.2	40	108	279
Zn	84.5	86.6	92.8	87.5	94.9	103	120	95.3
Ga	15.1	13.2	18.2	17.9	17.5	19.7	20	15.5
Rb	50.1	44.4	36.5	53.8	39.3	65.9	144	44.3
Sr	1491	1456	1595	1284	1401	1652	1573	1573
Y	25.1	26.6	26.6	26	28.4	29.5	35.3	25.3
Zr	254	251	290	241	305	352	544	343
Nb	102	103	148	93	102	102	168	126
Cs	0.767	0.773	0.985		1.53	2.13	4.64	1.51
Ba	178	1828	1095	1302	1300	1578	1566	1343
La	75.1	78.1	111	62.8	114	148	128	83.6
Ce	148	152	178	129	192	208	248	180
Pr	15.9	16.6	18		19.2	21.3	27.9	20.4
Nd	57.3	59.5	61.7	69.9	67.9	76.2	105.2	74.1
Sm	9.6	9.9	10		10.9	12.2	17.4	12.2
Eu	3.03	3.13	3.15		3.36	3.73	4.84	3.65
Gd	7.56	7.81	7.73		9.04	9.69	13.67	9.09
Tb	0.961	0.991	1.01		1.13	1.21	1.63	1.12
Dy	5.1	5.24	5.39		5.79	6.13	8.16	5.73
Ho	0.903	0.921	0.95		1	1.05	1.39	0.947
Er	2.21	2.24	2.34		2.46	2.59	3.32	2.19
Tm	0.294	0.3	0.307		0.331	0.339	0.419	0.274
Yb	1.82	1.83	1.89		2	2.05	2.38	1.58
Lu	0.265	0.269	0.272		0.283	0.294	0.343	0.225
Hf	4.69	4.7	5.09		5.47	6.61	10.4	6.99
Pb	6.27	6.18	6.12		6.3	7.09	9.33	5.05
Th	10.1	10.1	15.7		17.3	16.9	14.2	9.13
U	2.4	2.36	3.75		4.14	4.07	2.91	1.47