

DOI: 10.1590/2317-4889202020190120

Mineralogical evolution of the northern Bossoroca ophiolite, São Gabriel terrane

Amanda Juliano Massuda, Léo Afraneo Hartmann<sup>1</sup>, Gláucia Nascimento Queiroga, Marco Paulo de Castro, Carolina Gonçalves Leandro, Jairo Francisco Savian

Supplementary Table 3. Electron microprobe analyses of hornblende.

Amphibolite, Bossoroca ophiolite, sample C3P2

Analysis	1	2	3	4	5	6	7	8	9
SiO <sub>2</sub>	41.27	44.86	41.23	41.91	41.35	41.40	41.38	41.41	42.91
TiO <sub>2</sub>	0.43	0.41	0.47	0.17	0.45	0.41	0.51	0.46	0.40
Al <sub>2</sub> O <sub>3</sub>	17.15	11.63	17.06	17.32	17.31	17.00	17.24	16.84	15.60
FeO	15.50	16.67	16.64	15.31	15.87	16.03	15.77	16.00	15.00
MgO	9.53	11.64	8.89	9.83	9.45	9.42	9.52	9.60	10.55
CaO	10.42	10.72	10.46	10.69	10.60	10.56	10.58	10.68	10.83
Na <sub>2</sub> O	2.23	1.32	1.97	1.99	2.14	2.19	2.14	2.00	1.91
K <sub>2</sub> O	0.22	0.28	0.23	0.23	0.22	0.23	0.22	0.26	0.28
Total	96.75	97.53	96.95	97.45	97.39	97.24	97.36	97.25	97.48

Structural formulae based on 23 O assuming 13 cations excluding Ca, Na, K

Si	6.019	6.451	6.016	6.047	5.996	6.020	5.998	6.015	6.193
Ti	0.047	0.044	0.052	0.018	0.049	0.045	0.056	0.050	0.043
Al	2.948	1.971	2.934	2.945	2.958	2.913	2.945	2.883	2.654
Fe(iii)	0.992	1.313	1.057	1.019	1.015	1.004	1.020	1.050	0.931
Fe(ii)	0.898	0.691	0.973	0.829	0.909	0.945	0.891	0.893	0.879
Mg	2.072	2.496	1.934	2.115	2.043	2.042	2.057	2.079	2.270
Ca	1.628	1.652	1.635	1.653	1.647	1.645	1.643	1.662	1.675
Na	0.630	0.368	0.557	0.557	0.602	0.617	0.601	0.563	0.534
K	0.041	0.051	0.043	0.042	0.041	0.043	0.041	0.048	0.052
Total	15.275	15.037	15.201	15.225	15.260	15.274	15.252	15.243	15.231
Mg#	0.70	0.78	0.67	0.72	0.69	0.68	0.70	0.70	0.72
Fe <sup>3+</sup> /(Fe <sup>3+</sup> + <sup>VI</sup> Al)	0.51	0.76	0.53	0.51	0.52	0.52	0.52	0.54	0.52

Amphibolite, Bossoroca ophiolite, sample C3P2

Analysis	10	11	12	13	14	15	16	17
SiO <sub>2</sub>	42.48	48.91	41.54	48.04	48.34	41.95	49.35	42.75
TiO <sub>2</sub>	0.19	0.06	0.42	0.10	0.11	0.31	0.07	0.22
Al <sub>2</sub> O <sub>3</sub>	15.90	8.89	16.85	8.07	7.74	16.72	7.29	14.60

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FeO	15.24	12.84	16.50	14.12	14.22	15.18	13.30	15.58
MgO	10.30	14.24	9.51	15.51	15.52	9.63	15.18	11.78
CaO	10.61	10.88	10.53	9.97	9.79	10.77	10.58	10.42
Na <sub>2</sub> O	1.96	1.13	2.03	1.12	1.08	2.17	1.10	1.83
K <sub>2</sub> O	0.24	0.11	0.20	0.09	0.09	0.29	0.11	0.22
Total	96.92	97.06	97.58	97.02	96.89	97.02	96.98	97.40

Structural formulae based on 23 O assuming 13 cations excluding Ca, Na, K

Si	6.159	6.942	6.006	6.727	6.766	6.119	6.978	6.116
Ti	0.021	0.006	0.046	0.011	0.012	0.034	0.007	0.024
Al	2.717	1.487	2.871	1.332	1.277	2.874	1.215	2.462
Fe(iii)	1.031	0.977	1.158	1.653	1.664	0.785	1.288	1.516
Fe(ii)	0.817	0.547	0.836	0.000	0.000	1.066	0.285	0.348
Mg	2.226	3.013	2.050	3.238	3.238	2.094	3.200	2.513
Ca	1.648	1.654	1.631	1.496	1.468	1.683	1.603	1.597
Na	0.551	0.311	0.569	0.304	0.293	0.614	0.302	0.508
K	0.044	0.020	0.037	0.016	0.016	0.054	0.020	0.040
Total	15.214	14.957	15.204	14.777	14.734	15.323	14.898	15.124
Mg#	0.73	0.85	0.71	1.00	1.00	0.66	0.92	0.88
Fe <sup>3+</sup> /(Fe <sup>3+</sup> + <sup>VI</sup> Al)	0.54	0.69	0.57	0.97	0.98	0.44	0.87	0.72

Amphibolite, Bossoroca ophiolite, sample C3P2

Analysis	33	34	35	36	37	38	40	41	42	62
SiO <sub>2</sub>	44.48	49.05	48.87	46.64	47.37	45.31	43.31	44.22	47.00	41.16
TiO <sub>2</sub>	0.41	0.25	0.27	0.55	0.41	0.43	0.50	0.42	0.26	0.44
Al <sub>2</sub> O <sub>3</sub>	12.47	6.59	8.21	9.95	9.75	12.20	14.04	11.02	9.41	16.76
FeO	14.95	15.13	15.31	15.17	15.03	15.30	15.18	14.23	15.47	16.27
MgO	11.23	15.58	14.03	12.62	13.18	11.53	11.43	12.18	16.59	9.30
CaO	11.45	8.97	9.36	10.25	9.64	10.43	10.85	11.60	7.61	10.72
Na <sub>2</sub> O	1.71	0.91	1.11	1.34	1.32	1.38	1.76	1.28	0.83	1.98
K <sub>2</sub> O	0.24	0.11	0.13	0.16	0.14	0.18	0.22	0.34	0.10	0.24

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Total	96.94	96.59	97.29	96.68	96.84	96.76	97.29	95.29	97.27	96.87
Structural formulae based on 23 O assuming 13 cations excluding Ca, Na, K										
Si	6.499	6.829	6.840	6.687	6.714	6.529	6.238	6.547	6.346	6.016
Ti	0.045	0.026	0.028	0.059	0.044	0.047	0.054	0.047	0.026	0.048
Al	2.147	1.081	1.354	1.681	1.629	2.072	2.383	1.923	1.497	2.887
Cr	0.017	0.029	0.021	0.032	0.015	0.001	0.018	0.007	0.011	0.007
Fe(iii)	0.633	1.761	1.758	1.245	1.525	1.136	1.133	0.756	1.747	1.013
Fe(ii)	1.193	0.000	0.034	0.573	0.256	0.707	0.695	1.006	0.000	0.975
Mg	2.446	3.234	2.927	2.697	2.785	2.477	2.454	2.688	3.339	2.027
Ca	1.792	1.338	1.403	1.574	1.464	1.610	1.674	1.840	1.101	1.679
Na	0.484	0.246	0.301	0.372	0.363	0.386	0.491	0.367	0.217	0.561
K	0.045	0.020	0.023	0.029	0.025	0.033	0.040	0.064	0.017	0.045
Total	15.256	14.544	14.666	14.920	14.795	14.965	15.140	15.181	14.284	15.213
Mg#	0.67	1.00	0.99	0.82	0.92	0.78	0.78	0.73	1.00	0.68
Fe <sup>3+</sup> /(Fe <sup>3+</sup> + <sup>VI</sup> Al)	0.49	1.00	0.90	0.77	0.82	0.65	0.65	0.62	1.00	0.53

Amphibolite, Bossoroca ophiolite, sample C3P2

Analysis	63	64	65	66	67	68	69	88	90	
SiO <sub>2</sub>	41.96	41.93	41.66	52.08	45.52	42.63	41.97	45.18	44.96	
TiO <sub>2</sub>	0.38	0.48	0.39	0.23	0.38	0.41	2.15	0.40	0.40	
Al <sub>2</sub> O <sub>3</sub>	15.41	16.87	16.34	4.76	11.78	14.71	13.24	11.69	11.87	
FeO	17.48	16.13	17.23	14.66	14.81	15.96	15.46	15.96	15.98	
MgO	8.91	9.28	8.94	16.91	11.63	11.55	10.93	11.24	11.05	
CaO	11.46	10.52	10.67	7.62	10.61	10.33	11.40	10.64	11.07	
Na <sub>2</sub> O	1.82	1.93	1.93	0.82	2.01	1.74	1.36	1.58	1.47	
K <sub>2</sub> O	0.25	0.35	0.22	0.08	0.28	0.22	0.25	0.16	0.22	
Total	97.67	97.49	97.38	97.16	97.02	97.55	96.76	96.85	97.02	
Structural formulae based on 23 O assuming 13 cations excluding Ca, Na, K										
Si	6.164	6.075	6.064	7.071	6.601	6.087	6.158	6.558	6.544	
Ti	0.042	0.052	0.043	0.023	0.041	0.044	0.237	0.044	0.044	
Al	2.668	2.881	2.803	0.762	2.013	2.475	2.289	2.000	2.036	

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Cr	0.003	0.002	0.010	0.005	0.005	0.001	0.002	0.002	0.006
Fe(iii)	0.745	0.989	1.059	1.664	0.783	1.579	0.892	1.011	0.874
Fe(ii)	1.402	0.965	1.039	0.000	1.012	0.327	1.005	0.926	1.071
Mg	1.951	2.005	1.940	3.423	2.514	2.459	2.391	2.432	2.398
Ca	1.803	1.633	1.664	1.108	1.648	1.580	1.792	1.655	1.726
Na	0.518	0.542	0.545	0.216	0.565	0.482	0.387	0.445	0.415
K	0.047	0.065	0.041	0.014	0.052	0.040	0.047	0.030	0.041
Total	15.296	15.144	15.167	14.272	15.182	15.034	15.153	15.073	15.114
Mg#	0.58	0.67	0.65	1.00	0.71	0.88	0.70	0.72	0.69
Fe <sup>3+</sup> /(Fe <sup>3+</sup> + <sup>VI</sup> Al)	0.47	0.51	0.55	1.00	0.56	0.74	0.67	0.64	0.60

Metavolcanoclastic rock, Campestre Formation, sample C3P4

Analysis	1	2	3	4	5	7	8	9	10	11	12	13	14
SiO <sub>2</sub>	45.54	45.19	48.45	48.48	48.86	47.78	48.18	47.64	44.85	46.40	44.52	45.12	44.75
TiO <sub>2</sub>	0.27	0.35	0.49	1.18	1.18	1.00	0.46	0.44	0.39	0.34	0.29	0.43	0.32
Al <sub>2</sub> O <sub>3</sub>	11.95	11.90	8.02	6.70	6.44	7.00	8.68	8.52	12.74	10.54	12.65	12.09	12.30
FeO	13.41	13.38	13.19	12.76	12.59	13.28	12.83	13.19	13.73	13.79	13.75	13.60	13.72
MgO	11.01	11.91	13.23	14.24	14.43	13.79	12.58	13.04	10.90	11.60	10.87	11.23	11.14
CaO	13.31	13.14	12.84	12.80	12.91	12.85	13.35	13.14	13.04	13.25	13.41	12.90	12.92
Na <sub>2</sub> O	1.26	1.13	0.85	0.77	0.69	0.71	0.82	0.83	1.35	1.11	1.24	1.39	1.35
K <sub>2</sub> O	0.18	0.22	0.15	0.24	0.23	0.26	0.33	0.14	0.20	0.18	0.21	0.18	0.16
Total	96.93	97.22	97.22	97.17	97.33	96.67	97.23	96.94	97.20	97.21	96.94	96.94	96.66
Structural formulae based on 23 oxygen assuming 13 cations excluding Ca, Na, K													
Si	6.711	6.633	7.056	7.050	7.089	7.006	7.041	6.985	6.601	6.825	6.586	6.658	6.624
Ti	0.030	0.039	0.054	0.129	0.129	0.110	0.051	0.049	0.043	0.038	0.032	0.048	0.036
Al	2.075	2.058	1.376	1.148	1.101	1.210	1.495	1.472	2.210	1.827	2.205	2.103	2.146
Fe(iii)	0.000	0.102	0.125	0.238	0.214	0.270	0.000	0.067	0.000	0.000	0.000	0.000	0.013
Fe(ii)	1.652	1.540	1.481	1.313	1.313	1.359	1.568	1.550	1.690	1.696	1.701	1.678	1.685
Mg	2.419	2.606	2.872	3.087	3.121	3.015	2.741	2.851	2.392	2.544	2.397	2.471	2.458
Ca	2.101	2.066	2.003	1.994	2.007	2.019	2.090	2.064	2.056	2.088	2.125	2.039	2.049
Na	0.360	0.322	0.240	0.217	0.194	0.202	0.232	0.236	0.385	0.317	0.356	0.398	0.387

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K	0.034	0.041	0.028	0.045	0.043	0.049	0.062	0.026	0.038	0.034	0.040	0.034	0.030
Total	15.382	15.407	15.235	15.221	15.211	15.240	15.280	15.300	15.415	15.369	15.442	15.429	15.428
Mg#	0.59	0.63	0.66	0.70	0.70	0.69	0.64	0.65	0.59	0.60	0.58	0.60	0.59
Fe <sup>3+</sup> /(Fe <sup>3+</sup> +Al)	0.00	0.13	0.22	0.55	0.53	0.56	0.00	0.13	0.00	0.00	0.00	0.00	0.02

Metavolcanoclastic rock, Campestre Formation, sample C3P4

Analysis	15	16	27	28	29	30	31
SiO <sub>2</sub>	44.02	44.84	48.62	45.98	48.35	47.02	48.85
TiO <sub>2</sub>	0.29	0.23	0.53	1.32	0.71	1.64	0.51
Al <sub>2</sub> O <sub>3</sub>	13.51	12.74	8.16	9.53	7.18	7.95	6.94
FeO	13.86	13.90	13.47	14.25	13.77	13.61	13.96
MgO	10.44	10.89	12.90	11.94	13.52	12.69	13.52
CaO	13.14	12.91	12.77	12.71	12.67	12.87	12.10
Na <sub>2</sub> O	1.46	1.38	0.95	1.16	0.79	0.92	0.81
K <sub>2</sub> O	0.18	0.16	0.16	0.27	0.24	0.25	0.15
Total	96.90	97.05	97.56	97.16	97.23	96.95	96.84
Structural formulae based on 23 oxygen assuming 13 cations excluding Ca, Na, K							
Si	6.518	6.614	7.075	6.779	7.049	6.937	7.094
Ti	0.032	0.026	0.058	0.146	0.078	0.182	0.056
Al	2.357	2.214	1.399	1.656	1.234	1.382	1.188
Fe(iii)	0.000	0.000	0.055	0.093	0.284	0.000	0.492
Fe(ii)	1.716	1.714	1.584	1.664	1.394	1.679	1.203
Mg	2.305	2.395	2.798	2.624	2.939	2.791	2.927
Ca	2.084	2.040	1.991	2.008	1.979	2.034	1.882
Na	0.419	0.395	0.268	0.332	0.223	0.263	0.228
K	0.034	0.030	0.030	0.051	0.045	0.047	0.028
Total	15.465	15.428	15.258	15.353	15.225	15.315	15.098
Mg#	0.57	0.58	0.64	0.61	0.68	0.62	0.71
Fe <sup>3+</sup> /(Fe <sup>3+</sup> +Al)	0.00	0.00	0.10	0.18	0.50	0.00	0.64

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Metavolcanoclastic rock, Campestre Formation, sample C3P4

Analysis	32	33	34	35	36	45	46
SiO <sub>2</sub>	46.72	45.45	42.44	44.72	44.88	43.75	43.59
TiO <sub>2</sub>	0.36	0.39	0.23	0.27	0.26	0.36	0.35
Al <sub>2</sub> O <sub>3</sub>	11.40	11.89	15.06	12.87	12.78	13.53	13.84
FeO	13.97	13.74	15.90	14.07	14.09	13.95	14.21
MgO	11.03	11.65	11.93	10.66	10.93	10.96	10.31
CaO	12.18	12.96	10.21	13.15	13.28	13.33	12.95
Na <sub>2</sub> O	1.10	1.18	1.07	1.34	1.32	1.27	1.37
K <sub>2</sub> O	0.24	0.21	0.19	0.21	0.18	0.23	0.26
Total	97.00	97.47	97.03	97.29	97.72	97.38	96.88
Structural formulae based on 23 oxygen assuming 13 cations excluding Ca, Na, K							
Si	6.840	6.655	6.018	6.594	6.591	6.449	6.469
Ti	0.040	0.043	0.025	0.030	0.029	0.040	0.039
Al	1.967	2.052	2.517	2.236	2.212	2.351	2.420
Fe(iii)	0.092	0.109	1.885	0.000	0.000	0.046	0.003
Fe(ii)	1.618	1.573	0.000	1.735	1.730	1.673	1.760
Mg	2.407	2.543	2.522	2.343	2.393	2.409	2.281
Ca	1.910	2.033	1.551	2.077	2.089	2.105	2.059
Na	0.312	0.335	0.294	0.383	0.376	0.363	0.394
K	0.045	0.039	0.034	0.039	0.034	0.043	0.049
Total	15.231	15.382	14.846	15.437	15.454	15.479	15.474
Mg#	0.60	0.62	1.00	0.57	0.58	0.59	0.56
Fe <sup>3+</sup> /(Fe <sup>3+</sup> + <sup>VI</sup> Al)	0.10	0.13	0.78	0.00	0.00	0.05	0.00

Deformed Capivaras diorite, sample C3P17

Analysis	19	20	21	22	23	24	25	26	27
SiO <sub>2</sub>	48.43	48.98	49.53	48.59	48.61	48.68	48.32	48.50	48.73
TiO <sub>2</sub>	0.80	0.78	0.44	0.68	0.57	0.66	0.70	0.66	0.53
Al <sub>2</sub> O <sub>3</sub>	7.43	7.59	6.71	7.42	6.54	7.52	7.51	7.37	7.56

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FeO	12.58	12.44	12.31	12.68	12.14	12.18	12.15	12.10	12.14
MgO	13.98	13.87	15.08	13.96	15.64	13.94	15.00	15.10	14.46
CaO	11.79	11.78	11.95	11.71	11.68	11.94	11.56	11.62	11.91
Na <sub>2</sub> O	1.01	1.04	0.82	1.06	0.91	1.00	1.04	1.08	0.92
K <sub>2</sub> O	0.71	0.70	0.48	0.70	0.57	0.66	0.67	0.69	0.58
Total	96.73	97.18	97.32	96.80	96.66	96.58	96.95	97.12	96.83

Structural formulae based on 23 oxygen assuming 13 cations excluding Ca, Na, K

Si	7.034	7.085	7.094	7.054	6.982	7.086	6.940	6.961	7.040
Ti	0.087	0.085	0.047	0.074	0.062	0.072	0.076	0.071	0.058
Al	1.272	1.294	1.133	1.269	1.107	1.290	1.271	1.247	1.287
Fe(iii)	0.382	0.286	0.594	0.388	0.841	0.253	0.718	0.675	0.463
Fe(ii)	1.146	1.219	0.880	1.151	0.618	1.229	0.741	0.777	1.003
Mg	3.027	2.991	3.220	3.021	3.349	3.025	3.212	3.231	3.114
Ca	1.835	1.825	1.834	1.821	1.797	1.862	1.779	1.787	1.843
Na	0.284	0.292	0.228	0.298	0.253	0.282	0.290	0.301	0.258
K	0.132	0.129	0.088	0.130	0.104	0.123	0.123	0.126	0.107
Total	15.199	15.206	15.118	15.206	15.113	15.222	15.150	15.176	15.173
Mg#	0.73	0.71	0.79	0.72	0.84	0.71	0.81	0.81	0.76
Fe <sup>3+</sup> /(Fe <sup>3+</sup> +VIAl)	0.55	0.43	0.72	0.55	0.90	0.40	0.77	0.76	0.59

Deformed Capivaras diorite, sample C3P17

Analysis	28	29	30	48	49	50	54	55	56	67
SiO <sub>2</sub>	48.93	48.04	47.43	48.30	48.72	48.81	63.28	53.87	48.87	48.31
TiO <sub>2</sub>	0.59	0.71	0.81	0.51	0.66	0.54	0.00	0.09	0.61	0.65
Al <sub>2</sub> O <sub>3</sub>	7.84	7.71	8.14	6.28	7.75	7.09	19.69	2.41	7.60	7.42
FeO	11.75	12.15	12.71	12.76	12.30	12.04	0.29	9.93	11.50	11.53
MgO	14.38	14.74	14.56	15.37	14.48	15.05	0.36	17.21	15.30	15.08
CaO	11.78	11.70	11.20	12.02	11.68	11.85	0.25	13.01	11.80	12.99
Na <sub>2</sub> O	0.94	1.01	1.14	0.88	1.04	0.96	0.55	0.33	0.99	0.92
K <sub>2</sub> O	0.61	0.71	0.76	0.55	0.73	0.63	14.93	0.13	0.57	0.66
Total	96.82	96.77	96.75	96.67	97.36	96.97	99.35	96.98	97.24	97.56

Structural formulae based on 23 oxygen assuming 13 cations excluding Ca, Na, K

DOI: 10.1590/2317-4889202020190120

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Si	7.052	6.923	6.820	6.981	6.996	7.019	8.438	7.699	6.984	6.982
Ti	0.064	0.077	0.088	0.055	0.071	0.058	0.000	0.010	0.066	0.071
Al	1.332	1.309	1.379	1.070	1.312	1.201	3.094	0.406	1.280	1.264
Fe(iii)	0.415	0.634	0.861	0.783	0.523	0.592	0.000	0.071	0.621	0.215
Fe(ii)	1.001	0.830	0.667	0.759	0.954	0.856	0.032	1.116	0.753	1.178
Mg	3.090	3.167	3.121	3.312	3.100	3.226	0.072	3.667	3.260	3.249
Ca	1.819	1.806	1.725	1.861	1.797	1.826	0.036	1.992	1.807	2.011
Na	0.263	0.282	0.318	0.247	0.290	0.268	0.142	0.091	0.274	0.258
K	0.112	0.131	0.139	0.101	0.134	0.116	2.540	0.024	0.104	0.122
Total	15.148	15.159	15.118	15.169	15.177	15.162	14.354	15.076	15.149	15.350
Mg#	0.76	0.79	0.82	0.81	0.76	0.79	0.69	0.77	0.81	0.73
Fe <sup>3+</sup> /(Fe <sup>3+</sup> + <sup>VI</sup> Al)	0.52	0.73	0.81	0.94	0.63	0.73	0.00	0.40	0.70	0.47

Deformed Capivaras diorite, sample C3P17

Analysis	68	69	70	71	72	73	74	75	76
SiO <sub>2</sub>	47.76	48.02	48.14	48.37	48.75	48.97	48.44	48.42	48.84
TiO <sub>2</sub>	0.86	0.75	0.50	0.63	0.51	0.56	0.55	0.73	0.40
Al <sub>2</sub> O <sub>3</sub>	7.73	7.83	7.31	7.68	6.80	7.54	7.60	7.90	6.91
FeO	11.91	11.71	11.44	11.60	12.00	11.37	11.81	11.89	11.48
MgO	14.68	14.74	15.14	14.88	14.91	14.31	13.83	13.85	15.71
CaO	12.53	12.44	12.53	12.61	12.72	12.82	12.99	12.97	12.84
Na <sub>2</sub> O	1.15	1.09	0.88	0.92	0.84	0.98	1.03	1.03	0.89
K <sub>2</sub> O	0.78	0.73	0.65	0.59	0.62	0.61	0.64	0.73	0.51
Total	97.40	97.31	96.59	97.28	97.15	97.16	96.89	97.52	97.58

Structural formulae based on 23 oxygen assuming 13 cations excluding Ca, Na, K

Si	6.922	6.944	6.991	6.985	7.069	7.115	7.087	7.042	7.010
Ti	0.094	0.082	0.055	0.068	0.056	0.061	0.061	0.080	0.043
Al	1.320	1.334	1.251	1.307	1.162	1.291	1.310	1.354	1.169
Fe(iii)	0.275	0.308	0.381	0.311	0.279	0.000	0.000	0.000	0.426
Fe(ii)	1.168	1.108	1.008	1.090	1.176	1.381	1.445	1.446	0.952
Mg	3.172	3.178	3.278	3.204	3.223	3.100	3.017	3.003	3.361
Ca	1.946	1.927	1.949	1.951	1.976	1.996	2.036	2.021	1.974
Na	0.323	0.306	0.248	0.258	0.236	0.276	0.292	0.290	0.248



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K	0.144	0.135	0.120	0.109	0.115	0.113	0.119	0.135	0.093
Total	15.364	15.322	15.281	15.283	15.292	15.333	15.367	15.371	15.276
Mg#	0.73	0.74	0.76	0.75	0.73	0.69	0.68	0.67	0.78
Fe <sup>3+</sup> /Fe <sup>3+</sup> + <sup>VI</sup> Al	0.53	0.53	0.61	0.52	0.55	0.00	0.00	0.00	0.70

Deformed Capivaras diorite, sample C3P17

Analysis	83	84	85	86	87	88	104	105	106	107
SiO <sub>2</sub>	49.22	48.39	48.96	48.66	48.85	48.05	48.52	48.61	48.00	48.91
TiO <sub>2</sub>	0.42	0.77	0.70	0.50	0.45	0.80	0.79	0.57	0.75	0.57
Al <sub>2</sub> O <sub>3</sub>	6.98	7.48	7.33	6.43	7.20	7.40	7.75	6.60	7.71	7.36
FeO	11.03	12.09	11.82	11.53	11.66	12.88	12.56	12.58	12.27	12.29
MgO	15.88	15.10	15.32	15.78	15.64	14.86	14.40	14.66	13.91	14.74
CaO	12.61	11.44	11.64	12.70	11.62	11.34	11.37	12.63	11.96	11.58
Na <sub>2</sub> O	0.83	1.16	1.07	0.96	0.85	1.06	1.16	0.96	1.08	1.00
K <sub>2</sub> O	0.49	0.72	0.69	0.55	0.53	0.86	0.80	0.67	0.80	0.73
Total	97.46	97.15	97.53	97.11	96.8	97.25	97.35	97.28	96.48	97.18

Structural formulae based on 23 oxygen assuming 13 cations excluding Ca, Na, K

Si	7.041	6.939	6.984	7.029	6.977	6.896	6.971	7.064	7.014	7.028
Ti	0.045	0.083	0.075	0.054	0.048	0.086	0.085	0.062	0.082	0.062
Al	1.177	1.264	1.232	1.095	1.212	1.252	1.312	1.130	1.328	1.246
Fe(iii)	0.462	0.714	0.660	0.430	0.841	0.825	0.599	0.278	0.259	0.591
Fe(ii)	0.858	0.735	0.750	0.963	0.552	0.721	0.910	1.250	1.240	0.885
Mg	3.387	3.228	3.258	3.398	3.330	3.180	3.084	3.176	3.030	3.158
Ca	1.933	1.758	1.779	1.965	1.778	1.744	1.750	1.966	1.872	1.783
Na	0.230	0.322	0.296	0.269	0.235	0.295	0.323	0.270	0.306	0.279
K	0.089	0.132	0.126	0.101	0.097	0.157	0.147	0.124	0.149	0.134
Total	15.222	15.175	15.160	15.304	15.070	15.156	15.181	15.320	15.280	15.166
Mg#	0.80	0.81	0.81	0.78	0.86	0.82	0.77	0.72	0.71	0.78
Fe <sup>3+</sup> /Fe <sup>3+</sup> + <sup>VI</sup> Al	0.68	0.78	0.75	0.78	0.82	0.85	0.68	0.59	0.43	0.68