

APPENDIX 2

Selected microprobe analyses [in wt.%] and structural formulae of biotite from the Strzelin granites

	Medium-grained biotite granite			Very fine-grained granite		Fine-grained biotite granite					Biotite-muscovite granite		Aplite	
	200-2			6902 IV		200-1			300 IV		300 II-1	300II-1a	300 I-1	
	1	2	3	1	2	1	2	3	1	2	1	1	1	2
SiO ₂	33.41	33.38	33.63	33.58	33.86	34.08	34.51	34.8	33.02	33.69	32.71	33.45	33.15	33.45
TiO ₂	3.66	3.19	3.07	3.12	2.75	4.50	3.94	3.51	2.71	2.55	1.83	0.15	2.58	2.09
Al ₂ O ₃	16.67	16.20	16.79	16.96	17.11	16.74	16.67	16.39	16.78	16.56	19.31	19.51	18.40	18.72
Cr ₂ O ₃	0.00	0.04	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.01
FeO	28.95	29.34	29.14	29.25	29.40	25.33	25.36	25.31	26.83	27.27	27.83	26.08	27.49	27.21
MnO	0.54	0.46	0.33	0.44	0.38	0.44	0.69	0.54	0.90	0.86	1.18	1.39	0.74	0.76
MgO	3.33	3.48	3.54	3.01	2.98	4.90	5.41	5.34	5.13	5.38	2.92	4.77	3.92	4.05
CaO	0.00	0.09	0.00	0.00	0.00	0.08	0.00	0.02	0.02	0.00	0.02	0.00	0.01	0.02
BaO	0.19	0.13	0.24	0.07	0.03	0.35	0.30	0.38	0.11	0.00	0.00	0.19	0.19	0.02
Na ₂ O	0.09	0.07	0.04	0.09	0.10	0.16	0.08	0.08	0.09	0.08	0.04	0.05	0.05	0.06
K ₂ O	9.46	9.41	9.23	9.31	9.26	8.94	9.25	9.43	9.54	9.39	9.48	9.51	9.24	9.25
Sum	96.30	95.80	96.00	95.83	95.87	95.54	96.21	95.80	95.14	95.80	95.32	95.10	95.77	95.64
based on 22 O														
Si	5.341	5.376	5.380	5.384	5.419	5.375	5.408	5.480	5.307	5.365	5.251	5.336	5.277	5.311
Al ^{IV}	2.659	2.624	2.620	2.616	2.581	2.625	2.592	2.520	2.693	2.635	2.749	2.664	2.723	2.689
Ti	0.440	0.387	0.369	0.376	0.331	0.534	0.464	0.416	0.327	0.305	0.221	0.018	0.309	0.250
Al ^{VI}	0.482	0.452	0.546	0.589	0.646	0.486	0.488	0.523	0.486	0.474	0.905	1.004	0.730	0.813
Cr	0.000	0.005	0.000	0.000	0.000	0.003	0.000	0.000	0.001	0.002	0.000	0.000	0.000	0.001
Fe ⁺²	3.870	3.953	3.899	3.922	3.935	3.341	3.324	3.334	3.607	3.633	3.736	3.479	3.660	3.613
Mn	0.073	0.063	0.045	0.060	0.052	0.059	0.091	0.072	0.123	0.116	0.161	0.188	0.100	0.102
Mg	0.793	0.836	0.845	0.719	0.711	1.153	1.265	1.252	1.229	1.276	0.698	1.134	0.930	0.959
Ca	0.000	0.015	0.000	0.000	0.000	0.013	0.000	0.004	0.003	0.001	0.004	0.000	0.002	0.003
Ba	0.012	0.008	0.015	0.004	0.002	0.022	0.018	0.023	0.007	0.000	0.000	0.012	0.012	0.001
Na	0.029	0.022	0.012	0.029	0.031	0.050	0.024	0.024	0.000	0.000	0.011	0.016	0.015	0.018
K	1.928	1.933	1.883	1.903	1.891	1.799	1.850	1.895	1.955	1.907	1.942	1.936	1.877	1.873
Sum	15.627	15.674	15.614	15.602	15.599	15.460	15.524	15.543	15.738	15.714	15.678	15.787	15.635	15.633
Mg/(Mg + Fe + Mn)	0.17	0.17	0.18	0.15	0.15	0.25	0.27	0.27	0.25	0.25	0.15	0.24	0.20	0.21

1, 2, 3 – numbers of analyses