

APPENDIX 4

Chemical analyses of granites from the Strzelin intrusion

wt. %	Medium-grained		Fine-grained		Fine-grained		
	biotite granite		biotite granite		biotite muscovite granite		
	STR 2	300 V	STR 3	STIN 3	300 II-1	STIN 1	STIN 2
SiO ₂	74.69	73.90	72.02	73.00	76.46	76.00	76.30
TiO ₂	0.18	0.17	0.37	0.23	0.04	0.04	0.04
Al ₂ O ₃	12.79	13.4	13.86	14.05	12.36	13.40	13.5
Fe ₂ O ₃	1.72	1.74	2.45	1.74	0.71	0.46	0.49
MnO	0.03	0.02	0.04	0.04	0.04	0.01	0.02
MgO	0.19	0.19	0.54	0.36	0.09	0.08	0.08
CaO	1.81	1.26	3.39	1.82	1.01	0.62	0.55
Na ₂ O	2.37	3.36	2.77	3.67	2.82	3.49	3.94
K ₂ O	5.13	4.66	3.57	3.99	4.51	5.76	5.24
P ₂ O ₅	0.08	0.13	0.17	0.06	0.07	0.07	0.04
LOI	0.31	0.65	0.43	0.66	0.30	0.51	0.51
Total	99.28	99.48	99.61	99.62	98.42	100.44	100.71
Fe*	0.90	0.90	0.82	0.83	0.89	0.85	0.86
MALI	5.69	6.76	2.95	5.84	6.32	8.63	8.63
A/CNK	1.0	1.0	0.9	1.0	1.1	1.0	1.0
A/NK	1.4	1.3	1.6	1.4	1.3	1.1	1.1
ppm							
Co	18	143	16	57	20	50	47
V	7	5	23	11	6	<5	<5
Pb	11	18	10	23	21	31	25
Zn	68	35	85	43	66	13	16
Sn	2	2	2	4	4	3	4
Rb	149	131	128	142	302	237	253
Cs	1.70	1.86	2.10	4.40	3.60	4.07	4.67
Ba	1110	895	811	604	172	115	96
Sr	157	140	184	152	35	29	21
Tl	0.6	0.5	0.5	0.7	1.4	0.8	0.9
Ga	18	16	21	18	20	18	20
Ta	5.3	1.0	4.3	2.3	7.5	3.4	8.8
Nb	19.1	13.5	19.5	13.5	20.8	10.7	22.6
Hf	7.3	5.4	7.4	5.3	2.6	2.4	2.6
Zr	258	167	279	211	63	58	60
Y	22	14	29	16	26	26	23
Th	21.0	17.3	21.0	12.8	13.0	10.5	10.9
U	4.9	3.1	5.3	4.3	14.5	12.1	9.4
La	96.8	47.4	89.5	36.8	20.4	12.0	12.6
Ce	172.4	89.2	153.6	70.3	37.5	24.0	25.4
Pr	18.3	10.1	16.1	7.5	3.9	2.7	2.7
Nd	60.7	35.5	54.5	25.9	12.8	9.3	9.4
Sm	9.9	5.9	8.9	4.4	3.3	2.7	2.7
Eu	1.4	1.1	1.4	0.9	0.2	0.2	0.2
Gd	6.3	5.2	6.5	4.3	3.4	3.1	3.0
Tb	0.9	0.6	1.0	0.6	0.7	0.6	0.6
Dy	4.6	3	5.4	3	4.4	4.2	4.0
Ho	0.80	0.54	1.10	0.56	0.90	0.85	0.76
Er	2.2	1.7	3.0	1.7	2.5	2.7	2.3
Tm	0.30	0.23	0.50	0.24	0.40	0.40	0.38
Yb	2.1	1.6	2.7	1.6	2.8	2.9	2.6
Lu	0.30	0.23	0.40	0.24	0.40	0.42	0.39
REE	377.00	202.33	344.60	158.09	93.60	66.11	67.18
La _N /Yb _N	30.82	19.57	22.17	15.19	4.87	2.72	3.27
Eu/Eu*	0.54	0.61	0.57	0.64	0.18	0.22	0.19

Fe* – FeO^{tot}/(FeO^{tot}+MgO); total Fe is given as Fe₂O₃; MALI (modified alkali-lime index) – Na₂O+K₂O-CaO; A/CNK: A – mol Al₂O₃, C – mol CaO, N – mol Na₂O, K – mol K₂O; CNK – C + N + K; NK – N + K