

APPENDIX 1

Geochemical composition of low silica rocks from the Niemcza Zone

	Koźmice	Koźmice	Koźmice	Przedbor	Przedbor	Przedbor	Przedbor	Przedbor	Przedbor	Kośmin	Kośmin	Kośmin	Kośmin	Kłošnik	Piława	Wilków W
	BN003C	BN003A	JK001	BN004A	BN004B	BN004C	BN004D	JK002	JK003	JG001	JG002	JG003	JG004	JK004	JK005	JK006
Comment	far from contact	close to contact	close to contact	porphyritic	porphyritic	equigr.	equigr.	equigr.	equigr.	enclave	enclave	enclave	enclave			
SiO ₂	52.8	56.5	56.4	59.4	59.0	50.9	51.2	52.5	52.3	51.2	51.9	50.9	50.3	57.9	53.8	48.9
Al ₂ O ₃	16.1	13.9	14	15.4	15.2	17.7	13.8	17.8	17.5	16.8	14.8	15.6	9.9	15.7	13.9	10.5
Fe ₂ O ₃	8.8	7.4	7.1	7.0	7.3	10.1	11.3	8.7	9.1	8.7	8.5	8.6	9.0	6.8	7.9	6.4
MgO	5.4	6.2	5.8	3.7	4.0	5.4	6.7	4.0	4.2	5.9	7.1	6.9	9.9	4.9	6.6	13.5
CaO	7.1	6.6	6.8	5.6	5.9	8.4	8.0	8.9	8.7	7.3	8.4	8.3	11.9	6.1	8.0	9.5
Na ₂ O	2.9	2.4	2.6	2.9	2.7	2.6	2.2	3.4	3.3	2.8	2.5	2.9	1.2	2.7	2.7	1.1
K ₂ O	3.2	3.9	4.0	3.7	3.6	1.9	2.8	2.6	3.0	3.8	4.3	4.3	4.5	3.6	5.0	5.2
TiO ₂	1.2	0.7	0.8	0.8	0.8	1.3	1.6	0.8	0.8	1.1	0.7	0.9	0.8	0.7	0.8	0.9
P ₂ O ₅	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.3	0.3	0.4	0.2	0.3	0.7	0.5	0.5	1.0
LOI	1.4	1.4		0.7	0.6	0.8	1.2			1.5	0.9	0.9	1.2			2.1
Sum	99.4	99.4	97.9	99.6	99.5	99.5	99.4	99.0	99.2	99.5	99.3	99.6	99.4	98.9	99.2	99.1
Ba	1040	1233		1376	1493	1227	1141			653	1428	1253	1435			
Cs	5.3	5.5		3.6	3.4	1.9	2.6			10.5	5.5	9.5	5.1			
Ga	20.3	16.8		17.4	17.8	21.0	19.3			20.6	16.2	18.7	13.2			
Hf	5.7	4.5		5.2	5.0	3.2	4.4			3.4	3.4	3.5	4.3			
Nb	12.0	11.0		12.7	12.5	9.3	12.9			16.4	12.1	13.4	10.7			
Rb	150.7	133.0		106.7	107.1	51.0	80.4			258.2	158.3	202.2	176.3			
Sr	559.7	599.4		594.1	661.8	781.2	510.8			436	439.1	455.7	298.6			
Ta	0.6	0.6		0.8	0.7	0.6	0.6			0.9	0.7	0.7	0.6			
Th	9.6	13.6		16.4	15.8	6.7	11.6			7.1	5.1	2.1	9.8			
U	3.2	3.0		3.0	4.2	1.6	2.6			5.1	165.7	7.1	4.4			
V	231	163		167	157	258	337			266	184	180	206			
Zr	218.5	171.7		200.9	198.8	114.5	172.7			114.6	112.8	127.7	167.5			
Y	34.4	26.3		29.2	29.8	34.2	44.7			23.5	39.1	23.9	36.8			
La	42.5	46.4		44.1	49.4	36.4	46.0			24.1	23.8	20.1	47.7			
Ce	83.0	88.1		93.8	97.5	76.5	101.1			54.4	60.3	44.6	106.1			
Pr	10.58	11.22		10.71	11.49	10.17	14.03			7.22	8.82	6.21	13.92			
Nd	43.1	43.9		39.3	43.0	45.1	57.9			27.6	36.1	26.0	60.7			
Sm	9.22	8.57		8.46	8.74	9.00	12.78			6.59	8.98	6.04	11.54			
Eu	1.86	1.91		1.81	1.80	2.01	2.60			1.29	1.64	1.5	1.49			
Gd	8.45	7.60		7.41	7.90	9.02	12.08			5.25	7.91	5.19	9.5			
Tb	1.24	1.05		1.09	1.12	1.24	1.77			0.83	1.29	0.85	1.42			
Dy	6.52	5.33		5.99	5.46	6.63	8.99			4.25	7.00	4.34	6.79			
Ho	1.29	1.00		1.15	1.14	1.25	1.73			0.75	1.32	0.85	1.22			
Er	3.31	2.57		3.11	3.24	3.58	4.53			2.21	3.78	2.27	3.29			
Tm	0.49	0.34		0.48	0.43	0.46	0.62			0.34	0.57	0.36	0.51			
Yb	3.16	2.19		2.64	2.76	2.79	3.95			2.02	3.65	2.19	2.94			
Lu	0.45	0.33		0.42	0.43	0.45	0.55			0.32	0.53	0.34	0.43			
Cu	14.7	33.1		23.5	27.5	26.5	43.1			55.6	42.9	34.9	95.7			
Pb	3.4	9.4		9.7	10.3	5.1	4.1			9.2	9.5	6.9	10.9			
Zn	84	37		40	45	53	56			83	46	63	51			
Ni	8.5	32.4		6.7	6.6	6.0	9.2			20.8	54.2	65.3	165			
As	2.2	7.6		2.7	2.9	2.4	1.0			13.7	5.2	2.5	1.8			

Table SM2 U-Pb-Th isotope ratios and corresponding ages for the Przedborowa and Koźmice monzodiorites.

	Isotope ratios normalised to Plešovice								Age estimates								
	Pb ²⁰⁷ /Pb ²⁰⁶	±1σ	Pb ²⁰⁶ /U ²³⁸	±1σ	Pb ²⁰⁷ /U ²³⁵	±1σ	Pb ²⁰⁸ /Th ²³²	±1σ	Pb ²⁰⁷ /Pb ²⁰⁶	±1σ	Pb ²⁰⁶ /U ²³⁸	±1σ	Pb ²⁰⁷ /U ²³⁵	±1σ	Pb ²⁰⁸ /Th ²³²	±1σ	% concord.
Pdb_1	0.0527	0.0008	0.055	0.0005	0.4015	0.0069	0.0136	9E-05	316.1	35.5	345.3	3.2	342.7	5.0	273.5	1.9	101
Pdb_2	0.0563	0.0012	0.0533	0.0005	0.4146	0.0098	0.013	0.0001	461.8	46.3	335.0	3.3	352.2	7.0	260.7	2.4	95
Pdb_3	0.0548	0.0013	0.0552	0.0006	0.4177	0.011	0.0135	0.0002	402.1	50.9	346.3	3.5	354.4	7.9	271.1	3.2	98
Pdb_4	0.052	0.0011	0.0541	0.0005	0.3879	0.009	0.0138	0.0001	284.3	47.1	339.9	3.3	332.9	6.6	277.6	2.5	102
Pdb_5	0.0537	0.001	0.0546	0.0005	0.3986	0.008	0.0147	0.0001	358.6	40.6	342.6	3.3	340.6	5.8	294.4	2.4	101
Pdb_6	0.0535	0.0011	0.0539	0.0005	0.4018	0.0095	0.0146	0.0001	348.7	47.2	338.1	3.3	342.9	6.9	292.4	2.7	99
Pdb_7	0.0535	0.0013	0.0545	0.0006	0.4022	0.0112	0.0143	0.0002	350.2	54.8	341.8	3.5	343.3	8.1	286.4	3.4	100
Pdb_8	0.0554	0.0012	0.0547	0.0006	0.4206	0.01	0.0147	0.0001	429.9	46.0	343.1	3.4	356.5	7.1	294.2	2.6	96
Pdb_9	0.0533	0.0008	0.0548	0.0005	0.4002	0.0066	0.0136	9E-05	341.6	34.5	344.1	3.2	341.8	4.8	272.4	1.8	101
Pdb_10	0.0551	0.0009	0.0536	0.0005	0.4016	0.0072	0.013	0.0001	416.1	36.3	336.5	3.2	342.8	5.2	260.3	2.0	98
Koz1	0.0525	0.0019	0.0563	0.0007	0.4187	0.0171	0.0165	0.0003	307.3	79.0	352.9	4.2	355.1	12.3	330.1	5.6	99
Koz2	0.0524	0.0012	0.0542	0.0006	0.3877	0.0096	0.0159	0.0002	303.9	49.7	340.0	3.4	332.7	7.0	318.2	3.4	102
Koz4	0.0537	0.001	0.0534	0.0005	0.3933	0.0078	0.0157	0.0003	358.4	40.5	335.3	3.2	336.8	5.7	314.9	5.4	100
Koz5	0.0557	0.0011	0.0526	0.0005	0.3895	0.0081	0.0175	0.0002	439.0	41.3	330.5	3.2	334.0	5.9	351.0	3.0	99
Koz6	0.0542	0.001	0.0528	0.0005	0.3901	0.0079	0.0158	0.0002	380.2	41.0	331.9	3.2	334.4	5.8	316.0	4.7	99
Koz7	0.0536	0.0011	0.0533	0.0005	0.3975	0.0086	0.0162	0.0002	356.0	44.1	334.5	3.3	339.8	6.2	325.6	2.9	98
Koz8	0.0512	0.0011	0.0556	0.0006	0.3952	0.0089	0.0161	0.0001	249.8	46.3	348.5	3.4	338.2	6.5	323.1	2.9	103
Koz9	0.0547	0.001	0.0533	0.0005	0.3969	0.0081	0.0172	0.0002	398.4	40.8	334.8	3.3	339.4	5.9	344.9	3.9	99
Koz10	0.0565	0.0012	0.0539	0.0006	0.4171	0.0096	0.0151	0.0002	469.3	45.5	338.3	3.4	354.0	6.9	303.0	2.9	95