

Sample	Moldanubian Zone							
	PK102	PK101	PK103	LK11	PK106	LK13	PK98	PK99
SiO2 (wt.%)	61.6	62.1	59.4	59.1	53.8	57.4	60.3	56.2
TiO2	2.43	2	0.91	1.12	2.23	1.78	0.78	1.81
Al2O3	10.3	8.91	12.5	14.1	7.91	10	11.8	10.6
Fe2O3tot	6.36	4.59	4.19	3.96	5.76	5.57	4.46	5.12
MnO	0.07	0.06	0.08	0.06	0.1	0.12	0.08	0.08
MgO	2.26	5.46	4.69	2.81	7.32	5.9	5.27	5.92
CaO	2.23	1.96	4.66	4.74	5.53	4.36	3.72	4.09
Na2O	1.2	1.71	2.57	2.13	2.1	1.42	3.07	1.22
K2O	10	10.1	7.56	8.98	9.53	9.5	7.2	10.4
P2O5	1.29	0.98	1.39	1.3	2.55	1.96	1.13	2.08
LOI	1.2	1.5	0.7	1.25	1.6	1.21	1.1	1.3
TOTAL	98.9	99.4	98.7	99.6	98.4	99.2	98.9	98.8
Sr (ppm)	1400	917	2420	2480	2380	1360	1180	1490
Rb	447	370	185	139	235	294	267	394
Ba	2720	1130	6590	5050	5890	5300	5050	3530
Cs	4.5	1.8	1.5	1.6	2.1	3.7	3.8	5.5
Th	274	155	52.3	30.4	83.6	76.7	73.8	99.8
U	26.6	25.7	11	5.1	13	9.7	10.7	21.4
Ta	3.4	3	1.3	1	2.8	1.6	3.3	2
Nb	52.2	69.8	19.6	15.1	58.5	34.1	49.3	38.8
Zr	2070	1420	512	531	1450	854	350	1000
Hf	61	44.3	15.8	15	44.2	24.7	11.7	30.6
Y	35.9	34.9	31	23.4	45.9	25.5	26.8	30.7
Pb	56.9	41	35.2	22.5	47.7	68.8	100	111
Co	11.9	18	15.5	7.4	23.1	22.3	15.1	19.6
Ni	7.3	23.8	13	17.8	40	96.1	31.8	127.1
Cr	88.9	191	177	102	294	157	301	219
V	140	81	75	53	106	81	73	97
Zn	11	12	15	27	17	28	36	23
Cu	2.9	2.1	2.5	7.7	5.2	11.8	31	12.2
La	93.2	104	231	250	222	126	100	135
Ce	223	271	487	496	478	259	214	302
Pr	29.4	37	54.4	56.8	54.9	32.1	25.2	37.2
Nd	121	155	204	209	208	127	95.5	147
Sm	20.1	23.7	26.6	27.2	31.8	21.3	15.7	23.4
Eu	4	4.5	6.3	6.4	7.1	5.1	3.1	5.2
Gd	11.5	12.1	12.8	15.6	18.3	13.1	8.6	13.3
Tb	1.47	1.54	1.49	1.61	2.18	1.57	1.16	1.61
Dy	6.7	7.1	6	6.5	9.5	6.7	5.3	7.2
Ho	1.14	1.13	0.91	0.89	1.42	0.97	0.85	1.01
Er	2.9	3.1	2.4	2.2	3.7	2.6	2.4	2.4
Tm	0.45	0.47	0.34	0.28	0.54	0.34	0.33	0.34
Yb	3	3	2.2	1.6	3.3	2.2	2.3	2.2
Lu	0.46	0.42	0.33	0.24	0.47	0.28	0.33	0.3

West Sudetes Domain of the Saxo-Thuringian Zone

PK12	R1	Sample	PK13	PK100	PK14	PK17
60.2	59.6	SiO ₂ (wt,%)	60.7	67.9	62.9	62.1
0.55	0.55	TiO ₂	0.94	0.84	1.47	1.36
11.7	11.4	Al ₂ O ₃	11.8	11.8	12.3	12.1
4.61	4.15	Fe ₂ O ₃ tot	4.31	2.9	3.13	4.01
0.14	0.1	MnO	0.08	0.04	0.06	0.07
5.16	7.27	MgO	4.35	1.59	3.07	3.42
3.87	3.6	CaO	2.22	0.89	2.48	2.75
2.13	2.21	Na ₂ O	1.48	1.14	0.99	1.96
8.29	7.73	K ₂ O	10.6	10.7	11.1	9.48
1.01	0.86	P ₂ O ₅	1.14	0.62	0.61	0.6
1.2	2.81	LOI	1.1	0.8	0.8	0.8
98.9	100.3	TOTAL	98.7	99.2	98.9	98.7
1030	1230	Sr (ppm)	1040	490	1460	1410
271	173	Rb	358	373	327	309
4730	3620	Ba	4540	2070	3550	5600
3.1	4.8	Cs	8	17.2	5.4	3.5
62.1	56.3	Th	236	230	48.2	127
21.8	8.5	U	29	24.4	10.9	24.9
2.5	2	Ta	9	7.3	7.1	6.5
38.1	26.9	Nb	132	108	110	106
272	220	Zr	1700	1640	1700	1601
7.1	6.3	Hf	49.2	52.3	51.3	46.2
23.4	24.6	Y	29.2	26.2	19.7	32.9
18.5	267	Pb	61	72.3	53.1	150
17.4	16.1	Co	15.7	5.4	10.3	12.2
13	81.5	Ni	42.3	9.7	5.7	24.1
266	492	Cr	212	47.9	109	150
71	44	V	76	23	81	78
18	159	Zn	25	14	3	19
1.7	11.4	Cu	1.7	1.7	1.1	5.4
81.5	81.4	La	169	101	197	228
170	165	Ce	391	215	432	475
19.5	19.2	Pr	42.1	23.9	45.6	48
74.7	73.1	Nd	158	83.7	160	167
10.7	12.4	Sm	23.6	13.4	19.5	20.8
2.8	2.8	Eu	3.3	2	3.3	3.5
6.6	8.6	Gd	12.9	7.7	9.4	11.4
0.93	1.1	Tb	1.49	1.06	1.08	1.42
4.8	5.2	Dy	6.4	5.1	4.6	6.7
0.8	0.93	Ho	0.89	0.84	0.65	1.09
2.1	2.6	Er	2.2	2.2	1.6	2.5
0.28	0.38	Tm	0.32	0.32	0.24	0.4
2	2.3	Yb	2.1	2	1.3	2.5
0.32	0.34	Lu	0.29	0.29	0.22	0.35

	Sample	SiO ₂	TiO ₂	Al ₂ O ₃
Moldanubian Zone	PK102	61.6	2.43	10.3
	PK101	62.1	2.00	8.9
	PK103	59.4	0.91	12.5
	LK11	59.1	1.12	14.1
	PK106	53.8	2.23	7.9
	LK13	57.4	1.78	10.0
	PK98	60.3	0.78	11.8
	PK99	56.2	1.81	10.6
	PK12	60.2	0.55	11.7
	R1	59.6	0.55	11.4
	West Sudetes Domain of the Saxo-Thuringian Zone	PK13	60.7	0.94
PK100		67.9	0.84	11.8
PK14		62.9	1.47	12.3
PK17		62.1	1.36	12.1

Fe2O3tot	MnO	MgO	CaO	Na2O	K2O	P2O5	LOI	TOTAL
6.36	0.07	2.26	2.23	1.20	10.0	1.29	1.20	98.9
4.59	0.06	5.46	1.96	1.71	10.1	0.98	1.50	99.4
4.19	0.08	4.69	4.66	2.57	7.6	1.39	0.70	98.7
3.96	0.06	2.81	4.74	2.13	9.0	1.30	1.25	99.6
5.76	0.10	7.32	5.53	2.10	9.5	2.55	1.60	98.4
5.57	0.12	5.90	4.36	1.42	9.5	1.96	1.21	99.2
4.46	0.08	5.27	3.72	3.07	7.2	1.13	1.10	98.9
5.12	0.08	5.92	4.09	1.22	10.4	2.08	1.30	98.8
4.61	0.14	5.16	3.87	2.13	8.3	1.01	1.20	98.9
4.15	0.10	7.27	3.60	2.21	7.7	0.86	2.81	100.3
4.31	0.08	4.35	2.22	1.48	10.6	1.14	1.10	98.7
2.90	0.04	1.59	0.89	1.14	10.7	0.62	0.80	99.2
3.13	0.06	3.07	2.48	0.99	11.1	0.61	0.80	98.9
4.01	0.07	3.42	2.75	1.96	9.5	0.60	0.80	98.7

Sr	Rb	Ba	Cs	Th	U	Ta	Nb	Zr
1400	447	2720	4.5	274.0	26.6	3.4	52.2	2070
917	370	1130	1.8	155.0	25.7	3.0	69.8	1420
2420	185	6590	1.5	52.3	11.0	1.3	19.6	512
2480	139	5050	1.6	30.4	5.1	1.0	15.1	531
2380	235	5890	2.1	83.6	13.0	2.8	58.5	1450
1360	294	5300	3.7	76.7	9.7	1.6	34.1	854
1180	267	5050	3.8	73.8	10.7	3.3	49.3	350
1490	394	3530	5.5	99.8	21.4	2.0	38.8	1000
1030	271	4730	3.1	62.1	21.8	2.5	38.1	272
1230	173	3620	4.8	56.3	8.5	2.0	26.9	220
1040	358	4540	8.0	236.0	29.0	9.0	132.0	1700
490	373	2070	17.2	230.0	24.4	7.3	108.0	1640
1460	327	3550	5.4	48.2	10.9	7.1	110.0	1700
1410	309	5600	3.5	127.0	24.9	6.5	106.0	1601

Hf	Y	Pb	Co	Ni	Cr	V	Zn	Cu
61.0	35.9	56.9	11.9	7.3	88.9	140	11	2.9
44.3	34.9	41.0	18.0	23.8	191.0	81	12	2.1
15.8	31.0	35.2	15.5	13.0	177.0	75	15	2.5
15.0	23.4	22.5	7.4	17.8	102.0	53	27	7.7
44.2	45.9	47.7	23.1	40.0	294.0	106	17	5.2
24.7	25.5	68.8	22.3	96.1	157.0	81	28	11.8
11.7	26.8	100.0	15.1	31.8	301.0	73	36	31
30.6	30.7	111.0	19.6	127.1	219.0	97	23	12.2
7.1	23.4	18.5	17.4	13.0	266.0	71	18	1.7
6.3	24.6	267.0	16.1	81.5	492.0	44	159	11.4
49.2	29.2	61.0	15.7	42.3	212.0	76	25	1.7
52.3	26.2	72.3	5.4	9.7	47.9	23	14	1.7
51.3	19.7	53.1	10.3	5.7	109.0	81	3	1.1
46.2	32.9	150.0	12.2	24.1	150.0	78	19	5.4

La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy
93.2	223	29.4	121.0	20.1	4.0	11.5	1.47	6.7
104.0	271	37.0	155.0	23.7	4.5	12.1	1.54	7.1
231.0	487	54.4	204.0	26.6	6.3	12.8	1.49	6.0
250.0	496	56.8	209.0	27.2	6.4	15.6	1.61	6.5
222.0	478	54.9	208.0	31.8	7.1	18.3	2.18	9.5
126.0	259	32.1	127.0	21.3	5.1	13.1	1.57	6.7
100.0	214	25.2	95.5	15.7	3.1	8.6	1.16	5.3
135.0	302	37.2	147.0	23.4	5.2	13.3	1.61	7.2
81.5	170	19.5	74.7	10.7	2.8	6.6	0.93	4.8
81.4	165	19.2	73.1	12.4	2.8	8.6	1.10	5.2
169.0	391	42.1	158.0	23.6	3.3	12.9	1.49	6.4
101.0	215	23.9	83.7	13.4	2.0	7.7	1.06	5.1
197.0	432	45.6	160.0	19.5	3.3	9.4	1.08	4.6
228.0	475	48.0	167.0	20.8	3.5	11.4	1.42	6.7

Ho	Er	Tm	Yb	Lu
1.14	2.9	0.45	3.0	0.46
1.13	3.1	0.47	3.0	0.42
0.91	2.4	0.34	2.2	0.33
0.89	2.2	0.28	1.6	0.24
1.42	3.7	0.54	3.3	0.47
0.97	2.6	0.34	2.2	0.28
0.85	2.4	0.33	2.3	0.33
1.01	2.4	0.34	2.2	0.30
0.80	2.1	0.28	2.0	0.32
0.93	2.6	0.38	2.3	0.34
0.89	2.2	0.32	2.1	0.29
0.84	2.2	0.32	2.0	0.29
0.65	1.6	0.24	1.3	0.22
1.09	2.5	0.40	2.5	0.35

	Sample	Symbol	SiO ₂	TiO ₂
Moldanubian Zone	PK102	1	61.6	2.43
	PK101	1	62.1	2.00
	PK103	1	59.4	0.91
	LK11	1	59.1	1.12
	PK106	1	53.8	2.23
	LK13	1	57.4	1.78
	PK98	1	60.3	0.78
	PK99	1	56.2	1.81
	PK12	1	60.2	0.55
	R1	1	59.6	0.55
	West Sudetes Domain of the Saxo-Thuringian Zone	PK13	16	60.7
PK100		16	67.9	0.84
PK14		16	62.9	1.47
PK17		16	62.1	1.36

Al ₂ O ₃	Fe ₂ O ₃ tot	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	LOI
10.3	6.36	0.07	2.26	2.23	1.20	10.0	1.29	1.20
8.9	4.59	0.06	5.46	1.96	1.71	10.1	0.98	1.50
12.5	4.19	0.08	4.69	4.66	2.57	7.6	1.39	0.70
14.1	3.96	0.06	2.81	4.74	2.13	9.0	1.30	1.25
7.9	5.76	0.10	7.32	5.53	2.10	9.5	2.55	1.60
10.0	5.57	0.12	5.90	4.36	1.42	9.5	1.96	1.21
11.8	4.46	0.08	5.27	3.72	3.07	7.2	1.13	1.10
10.6	5.12	0.08	5.92	4.09	1.22	10.4	2.08	1.30
11.7	4.61	0.14	5.16	3.87	2.13	8.3	1.01	1.20
11.4	4.15	0.10	7.27	3.60	2.21	7.7	0.86	2.81
11.8	4.31	0.08	4.35	2.22	1.48	10.6	1.14	1.10
11.8	2.90	0.04	1.59	0.89	1.14	10.7	0.62	0.80
12.3	3.13	0.06	3.07	2.48	0.99	11.1	0.61	0.80
12.1	4.01	0.07	3.42	2.75	1.96	9.5	0.60	0.80

TOTAL	Sr	Rb	Ba	Cs	Th	U	Ta	Nb
98.9	1400	447	2720	4.5	274.0	26.6	3.4	52.2
99.4	917	370	1130	1.8	155.0	25.7	3.0	69.8
98.7	2420	185	6590	1.5	52.3	11.0	1.3	19.6
99.6	2480	139	5050	1.6	30.4	5.1	1.0	15.1
98.4	2380	235	5890	2.1	83.6	13.0	2.8	58.5
99.2	1360	294	5300	3.7	76.7	9.7	1.6	34.1
98.9	1180	267	5050	3.8	73.8	10.7	3.3	49.3
98.8	1490	394	3530	5.5	99.8	21.4	2.0	38.8
98.9	1030	271	4730	3.1	62.1	21.8	2.5	38.1
100.3	1230	173	3620	4.8	56.3	8.5	2.0	26.9
98.7	1040	358	4540	8.0	236.0	29.0	9.0	132.0
99.2	490	373	2070	17.2	230.0	24.4	7.3	108.0
98.9	1460	327	3550	5.4	48.2	10.9	7.1	110.0
98.7	1410	309	5600	3.5	127.0	24.9	6.5	106.0

Zr	Hf	Y	Pb	Co	Ni	Cr	V	Zn
2070	61.0	35.9	56.9	11.9	7.3	88.9	140	11
1420	44.3	34.9	41.0	18.0	23.8	191.0	81	12
512	15.8	31.0	35.2	15.5	13.0	177.0	75	15
531	15.0	23.4	22.5	7.4	17.8	102.0	53	27
1450	44.2	45.9	47.7	23.1	40.0	294.0	106	17
854	24.7	25.5	68.8	22.3	96.1	157.0	81	28
350	11.7	26.8	100.0	15.1	31.8	301.0	73	36
1000	30.6	30.7	111.0	19.6	127.1	219.0	97	23
272	7.1	23.4	18.5	17.4	13.0	266.0	71	18
220	6.3	24.6	267.0	16.1	81.5	492.0	44	159
1700	49.2	29.2	61.0	15.7	42.3	212.0	76	25
1640	52.3	26.2	72.3	5.4	9.7	47.9	23	14
1700	51.3	19.7	53.1	10.3	5.7	109.0	81	3
1601	46.2	32.9	150.0	12.2	24.1	150.0	78	19

Cu	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb
2.9	93.2	223	29.4	121.0	20.1	4.0	11.5	1.47
2.1	104.0	271	37.0	155.0	23.7	4.5	12.1	1.54
2.5	231.0	487	54.4	204.0	26.6	6.3	12.8	1.49
7.7	250.0	496	56.8	209.0	27.2	6.4	15.6	1.61
5.2	222.0	478	54.9	208.0	31.8	7.1	18.3	2.18
11.8	126.0	259	32.1	127.0	21.3	5.1	13.1	1.57
31	100.0	214	25.2	95.5	15.7	3.1	8.6	1.16
12.2	135.0	302	37.2	147.0	23.4	5.2	13.3	1.61
1.7	81.5	170	19.5	74.7	10.7	2.8	6.6	0.93
11.4	81.4	165	19.2	73.1	12.4	2.8	8.6	1.10
1.7	169.0	391	42.1	158.0	23.6	3.3	12.9	1.49
1.7	101.0	215	23.9	83.7	13.4	2.0	7.7	1.06
1.1	197.0	432	45.6	160.0	19.5	3.3	9.4	1.08
5.4	228.0	475	48.0	167.0	20.8	3.5	11.4	1.42

Dy	Ho	Er	Tm	Yb	Lu	$^{87}\text{Sr}/^{86}\text{Sr}$	$^{143}\text{Nd}/^{144}\text{Nd}$
6.7	1.14	2.9	0.45	3.0	0.46	0.713627	0.512031
7.1	1.13	3.1	0.47	3.0	0.42	0.714383	0.512062
6.0	0.91	2.4	0.34	2.2	0.33	0.707254	0.512226
6.5	0.89	2.2	0.28	1.6	0.24	0.706943	0.512241
9.5	1.42	3.7	0.54	3.3	0.47	0.707939	0.512219
6.7	0.97	2.6	0.34	2.2	0.28	0.710693	0.512149
5.3	0.85	2.4	0.33	2.3	0.33	0.710735	0.512154
7.2	1.01	2.4	0.34	2.2	0.30	0.711059	0.512142
4.8	0.80	2.1	0.28	2.0	0.32	0.711015	0.512147
5.2	0.93	2.6	0.38	2.3	0.34		
6.4	0.89	2.2	0.32	2.1	0.29	0.717235	0.512076
5.1	0.84	2.2	0.32	2.0	0.29	0.723085	0.512087
4.6	0.65	1.6	0.24	1.3	0.22	0.712028	0.512082
6.7	1.09	2.5	0.40	2.5	0.35	0.712011	0.512086

