

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Tol	UO3	P2O5	ThO2	HfO2	ZrO2	TiO2	SiO2	Nd2O3	Ce2O3
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_zircao	4	2	0.0381	0.007	0.086	1.373	64.048	0.014	32.66	0.003	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_3_zircao	1	2	0	0.032	0.138	0.951	64.587	0	32.546	0.039	0.215
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_zircao	1	2	0.0424	0.266	0	1.663	63.494	0	32.214	0.018	0
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_3_zircao	2	2	0	0.069	0.178	1.22	64.521	0.01	32.83	0.021	0.093
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_zircao	1	2	0.0392	0.036	0	1.081	64.795	0	32.721	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_zircao	1	2	0.3443	0.288	1.365	1.304	62.567	0	32.064	0	0.028
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	2	2	0.1112	0.098	0	0.946	64.94	0.021	32.53	0	0.033
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	4	2	0.1578	0.039	0.086	1.533	64.745	0.048	32.49	0.016	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_zircao	5	2	0.0816	0.226	0	1.301	64.366	0.096	32.297	0	0.096
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	2	2	0	0.083	0.052	1.113	65.214	0	32.27	0.086	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	3	2	0.0551	0.13	0.019	1.122	64.909	0	32.547	0	0.037
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	4	2	0.0508	0.107	0	1.237	64.961	0	32.479	0.036	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	5	2	0.0169	0.1	0.165	1.097	64.874	0	32.536	0	0.004
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	1	2	0.0466	0	0.052	1.445	64.879	0.026	32.476	0.082	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	2	2	0.0339	0	0.216	1.385	64.865	0	32.675	0.062	0.063
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	3	2	0.0593	0	0	1.339	64.96	0.062	32.486	0	0.037
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_2_zircao	1	2	0.0678	0.083	0.295	1.137	64.555	0.027	32.608	0.049	0.2
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_3_zircao	1	2	0.2383	0.035	0	1.533	64.994	0	32.529	0.008	0
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	2	2	0.2849	0	0.134	1.884	65.208	0	32.6	0	0.049
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	4	2	0.1663	0.096	0.138	1.193	64.477	0	32.538	0.017	0.188
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	5	2	0.2013	0.106	0.254	1.167	64.489	0.023	32.564	0	0.028
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_5_zircao	1	2	0	0.026	0	1.09	64.489	0	32.472	0.033	0.063
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_zircao	1	2	0	0.108	0.067	1.093	63.691	0.011	33.117	0.085	0
MOSTMEG	P#15	Portugal	CIZ	MP	BG_PT	R	RI	MOSTMEG_lvo-P15_3_zircao	2	2	0.09	0.179	0.082	1.274	64.2	0	32.307	0	0.05
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	1	2	0.0297	0.099	0.101	1.119	62.812	0.072	32.478	0	0.147
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	2	2	0.1239	0.119	0	0.948	65.146	0.005	32.188	0.037	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	4	2	0.0212	0.05	0	1.329	64.425	0.063	32.742	0.016	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_3_zircao	2	2	0.1801	0.176	0.139	1.161	63.803	0.024	32.474	0.051	0.027
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_zircao	2	2	0.2987	0.208	0.007	1.269	63.979	0.018	32.185	0.007	0.065
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_5_zircao	1	2	0	0.043	0.082	1.129	64.4	0.013	32.401	0.085	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_5_zircao	2	2	0.0085	0.003	0.105	0.852	64.551	0.165	32.492	0	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_6_zircao	1	2	0.0593	0.106	0.101	1.077	64.096	0	32.403	0.076	0.17
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_8_zircao	2	2	0.0127	0.035	0.12	1.167	64.434	0	32.708	0	0.007
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_8_zircao	3	2	0.0085	0.027	0	1.524	64.658	0	32.742	0	0.192
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_2_zircao	4	2	0	0.044	0.135	1.07	63.588	0	32.451	0.03	0.052
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_6_zircao	1	2	0.1197	0.09	0.022	1.442	63.809	0.025	32.466	0	0.028
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_1_zircao	2	2	0.0233	0.111	0.038	0.836	63.928	0.021	32.585	0.058	0.152
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	1	2	0	0.013	0	0.923	65.069	0.005	32.887	0	0.116
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	4	2	0	0	0	1.197	64.649	0.03	32.624	0	0.055
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	5	2	0.1112	0	0.235	1.263	64.142	0.044	32.679	0	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_zircao	1	2	0.1239	0	0.041	1.721	64.473	0	32.515	0.008	0.064
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_zircao	2	2	0.1059	0.254	0.271	1.112	63.951	0.009	32.447	0	0.159
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_zircao	1	2	0.0763	0	0.115	0.912	63.853	0.024	32.995	0.066	0.123

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	La2O3	Fe2O3	Al2O3	MnO	CaO	MgO	Total	P5+	Si4+
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_zircao	4	0	0.1989	0	0	0	0.023	98.4511	0.0007	4.0532
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_3_zircao	1	0	0.2878	0	0.015	0.022	0.016	98.8488	0.0034	4.0281
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_zircao	1	0.005	0.3067	0	0.026	0.027	0	98.0621	0.0281	4.0174
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_3_zircao	2	0	0.419	0	0.049	0.006	0.003	99.419	0.0072	4.0373
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_zircao	1	0.059	0.3901	0	0.059	0.02	0.018	99.2183	0.0038	4.0297
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_zircao	1	0.038	1.0647	0.001	0.007	0.023	0.019	99.1129	0.0303	3.9882
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	2	0	0.2034	0.011	0.001	0	0.017	98.9116	0.0102	4.0181
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	4	0.083	0.1545	0.003	0.001	0.028	0	99.3843	0.0041	4.0125
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_zircao	5	0.064	0.4845	0.03	0.032	0.016	0.009	99.0991	0.0236	3.9895
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	2	0.021	0.0133	0.001	0	0.012	0	98.8653	0.0087	4.0006
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	3	0.022	0.0267	0	0	0	0	98.8678	0.0136	4.0239
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	4	0	0.0211	0	0	0	0	98.892	0.0112	4.0185
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	5	0	0.03	0.018	0	0	0	98.841	0.0105	4.0252
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	1	0	0.4312	0.004	0.008	0.016	0.007	99.4728	0	4.0059
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	2	0	0.379	0.013	0.035	0.011	0.013	99.7509	0	4.0185
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	3	0.092	0.5412	0	0	0	0	99.5765	0	4.0014
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_2_zircao	1	0.006	0.2489	0.023	0.075	0.027	0.022	99.4237	0.0087	4.0195
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_3_zircao	1	0.022	0.1723	0	0	0.023	0.011	99.5656	0.0037	4.01
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	2	0	0.1056	0	0.04	0.014	0.006	100.3255	0	4.0027
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	4	0.014	0.0422	0.035	0	0	0.016	98.9205	0.0101	4.0276
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	5	0	0.0989	0.073	0.02	0.028	0	99.0522	0.0111	4.0237
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_5_zircao	1	0.001	0.0756	0.008	0	0.01	0.012	98.2796	0.0027	4.0371
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_zircao	1	0.04	0.8124	0.157	0	0.015	0.011	99.2074	0.0112	4.0591
MOSTMEG	P#15	Portugal	CIZ	MP	BG_PT	R	RI	MOSTMEG_lvo-P15_3_zircao	2	0	0.5446	0.306	0	0.03	0.017	99.0796	0.0187	3.9866
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	1	0	0.6057	0.731	0	0.137	0.093	98.4243	0.0103	4.0104
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	2	0.018	0.3579	0.048	0	0.098	0	99.0888	0.0125	3.9797
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	4	0.092	0.3378	0	0	0	0.025	99.101	0.0052	4.0371
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_3_zircao	2	0	0.0633	0	0.053	0	0.007	98.1584	0.0185	4.0407
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_zircao	2	0	0.4823	0.116	0.007	0.187	0.01	98.839	0.0218	3.9871
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_5_zircao	1	0.042	0.2856	0.06	0.067	0.114	0.014	98.7356	0.0045	4.0158
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_5_zircao	2	0	0.3567	0.027	0.004	0	0.002	98.5662	0.0003	4.0242
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_6_zircao	1	0	0.3501	0.445	0	0.24	0.041	99.1644	0.0111	3.9921
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_8_zircao	2	0	0.2512	0.006	0	0.014	0	98.7549	0.0037	4.0452
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_8_zircao	3	0	0.3345	0.024	0.023	0.036	0	99.569	0.0028	4.0281
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_2_zircao	4	0.054	0.6757	0.572	0.05	0.031	0.042	98.7947	0.0046	4.0043
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_6_zircao	1	0	0.2634	0.002	0.038	0.004	0.006	98.3151	0.0095	4.0375
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_1_zircao	2	0.011	0.2801	0	0	0	0	98.0434	0.0117	4.0502
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	1	0	0.2489	0	0.007	0.02	0.01	99.2989	0.0014	4.0421
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	4	0.035	0.2912	0.005	0	0.032	0.005	98.9232	0	4.0323
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	5	0	0.2845	0.004	0	0.004	0	98.7667	0	4.0467
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_zircao	1	0.036	0.1856	0.001	0	0.008	0.019	99.1955	0	4.0238
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_zircao	2	0	0.4879	0.009	0.066	0.128	0	98.9998	0.0266	4.0094
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_zircao	1	0.049	0.5323	0.367	0	0.026	0.032	99.1706	0	4.0493

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Total	U6+	Th4+	Hf4+	Zr4+	Ti4+	Nd3+	Ce3+	La3+
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_zircao	4	4.054	0.001	0.0024	0.0486	3.8758	0.0013	0.0001	0	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_3_zircao	1	4.0315	0	0.0039	0.0336	3.8978	0	0.0017	0.0097	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_zircao	1	4.0455	0.0011	0	0.0592	3.8611	0	0.0008	0	0.0002
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_3_zircao	2	4.0444	0	0.005	0.0428	3.8689	0.0009	0.0009	0.0042	0
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_zircao	1	4.0334	0.001	0	0.038	3.8909	0	0	0	0.0027
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_zircao	1	4.0185	0.009	0.0386	0.0463	3.7947	0	0	0.0013	0.0017
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	2	4.0284	0.0029	0	0.0334	3.9113	0.002	0	0.0015	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	4	4.0166	0.0041	0.0024	0.054	3.8989	0.0045	0.0007	0	0.0038
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_zircao	5	4.0132	0.0021	0	0.0459	3.8769	0.0089	0	0.0043	0.0029
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	2	4.0093	0	0.0015	0.0394	3.9422	0	0.0038	0	0.001
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	3	4.0375	0.0014	0.0005	0.0396	3.913	0	0	0.0017	0.001
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	4	4.0297	0.0013	0	0.0437	3.9191	0	0.0016	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	5	4.0357	0.0004	0.0046	0.0387	3.9135	0	0	0.0002	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	1	4.0059	0.0012	0.0015	0.0509	3.9022	0.0024	0.0036	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	2	4.0185	0.0009	0.006	0.0486	3.8899	0	0.0027	0.0028	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	3	4.0014	0.0015	0	0.0471	3.9015	0.0057	0	0.0017	0.0042
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_2_zircao	1	4.0281	0.0018	0.0083	0.04	3.8801	0.0025	0.0022	0.009	0.0003
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_3_zircao	1	4.0136	0.0062	0	0.0539	3.9067	0	0.0004	0	0.001
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	2	4.0027	0.0073	0.0037	0.066	3.904	0	0	0.0022	0
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	4	4.0377	0.0043	0.0039	0.0422	3.8916	0	0.0008	0.0085	0.0006
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	5	4.0348	0.0052	0.0071	0.0412	3.8855	0.0021	0	0.0013	0
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_5_zircao	1	4.0399	0	0	0.0387	3.9095	0	0.0015	0.0029	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_zircao	1	4.0703	0	0.0019	0.0382	3.8065	0.001	0.0037	0	0.0018
MOSTMEG	P#15	Portugal	CIZ	MP	BG_PT	R	RI	MOSTMEG_lvo-P15_3_zircao	2	4.0053	0.0023	0.0023	0.0449	3.8628	0	0	0.0023	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	1	4.0208	0.0008	0.0028	0.0394	3.7819	0.0067	0	0.0066	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	2	3.9921	0.0032	0	0.0335	3.9275	0.0005	0.0016	0	0.0008
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_zircao	4	4.0424	0.0005	0	0.0468	3.8734	0.0058	0.0007	0	0.0042
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_3_zircao	2	4.0593	0.0047	0.0039	0.0412	3.8711	0.0022	0.0023	0.0012	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_zircao	2	4.0089	0.0078	0.0002	0.0449	3.8647	0.0017	0.0003	0.0029	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_5_zircao	1	4.0203	0	0.0023	0.0399	3.8919	0.0012	0.0038	0	0.0019
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_5_zircao	2	4.0245	0.0002	0.003	0.0301	3.8983	0.0154	0	0	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_6_zircao	1	4.0031	0.0015	0.0028	0.0379	3.8505	0	0.0033	0.0077	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_8_zircao	2	4.0489	0.0003	0.0034	0.0412	3.8858	0	0	0.0003	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_8_zircao	3	4.0309	0.0002	0	0.0535	3.8787	0	0	0.0086	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_2_zircao	4	4.0089	0	0.0038	0.0377	3.8259	0	0.0013	0.0023	0.0025
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_6_zircao	1	4.047	0.0031	0.0006	0.0512	3.8693	0.0023	0	0.0013	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_1_zircao	2	4.0618	0.0006	0.0011	0.0297	3.8745	0.002	0.0026	0.0069	0.0005
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	1	4.0434	0	0	0.0324	3.8996	0.0005	0	0.0052	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	4	4.0323	0	0	0.0422	3.8962	0.0028	0	0.0025	0.0016
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	5	4.0467	0.0029	0.0066	0.0446	3.873	0.0041	0	0	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_zircao	1	4.0238	0.0032	0.0012	0.0608	3.8904	0	0.0004	0.0029	0.0016
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_zircao	2	4.036	0.0027	0.0076	0.0392	3.8532	0.0008	0	0.0072	0
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_zircao	1	4.0493	0.002	0.0032	0.0319	3.8211	0.0022	0.0029	0.0055	0.0022

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Fe3+	Al3+	Mn2+	Ca2+	Mg2+	Total
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_zircao	4	0.0186	0	0	0	0.0043	3.9521
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_3_zircao	1	0.0268	0	0.0016	0.0029	0.003	3.981
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_zircao	1	0.0288	0	0.0027	0.0036	0	3.9575
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_3_zircao	2	0.0388	0	0.0051	0.0008	0.0005	3.968
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_zircao	1	0.0362	0	0.0062	0.0026	0.0033	3.9809
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_zircao	1	0.0997	0.0001	0.0007	0.0031	0.0035	3.9988
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	2	0.0189	0.0016	0.0001	0	0.0031	3.9747
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_zircao	4	0.0144	0.0004	0.0001	0.0037	0	3.987
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_zircao	5	0.045	0.0044	0.0033	0.0021	0.0017	3.9976
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	2	0.0012	0.0001	0	0.0016	0	3.9908
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	3	0.0025	0	0	0	0	3.9597
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	4	0.002	0	0	0	0	3.9677
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_zircao	5	0.0028	0.0026	0	0	0	3.9629
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	1	0.04	0.0006	0.0008	0.0021	0.0013	4.0067
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	2	0.0351	0.0019	0.0036	0.0014	0.0024	3.9954
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_zircao	3	0.0502	0	0	0	0	4.0119
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_2_zircao	1	0.0231	0.0033	0.0078	0.0036	0.004	3.986
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_3_zircao	1	0.016	0	0	0.003	0.002	3.9892
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	2	0.0098	0	0.0042	0.0018	0.0011	4.0002
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	4	0.0039	0.0051	0	0	0.003	3.9639
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_4_zircao	5	0.0092	0.0106	0.0021	0.0037	0	3.968
MOSTMEG	MT#11	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT11_5_zircao	1	0.0071	0.0012	0	0.0013	0.0022	3.9644
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_zircao	1	0.0749	0.0227	0	0.002	0.002	3.9547
MOSTMEG	P#15	Portugal	CIZ	MP	BG_PT	R	Ri	MOSTMEG_lvo-P15_3_zircao	2	0.0506	0.0445	0	0.004	0.0031	4.0168
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_1_zircao	1	0.0563	0.1064	0	0.0181	0.0171	4.0362
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_1_zircao	2	0.0333	0.007	0	0.013	0	4.0203
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_1_zircao	4	0.0313	0	0	0	0.0046	3.9674
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_3_zircao	2	0.0059	0	0.0056	0	0.0013	3.9395
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_4_zircao	2	0.045	0.0169	0.0007	0.0248	0.0018	4.0117
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_5_zircao	1	0.0266	0.0088	0.007	0.0151	0.0026	4.0012
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_5_zircao	2	0.0332	0.0039	0.0004	0	0.0004	3.985
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_6_zircao	1	0.0325	0.0646	0	0.0317	0.0075	4.04
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_8_zircao	2	0.0234	0.0009	0	0.0019	0	3.9571
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTi	MOSTMEG_lvo-P4_8_zircao	3	0.031	0.0035	0.0024	0.0047	0	3.9827
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_2_zircao	4	0.0627	0.0832	0.0052	0.0041	0.0077	4.0365
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_6_zircao	1	0.0246	0.0003	0.004	0.0005	0.0011	3.9585
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_1_zircao	2	0.0262	0	0	0	0	3.944
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	1	0.023	0	0.0007	0.0026	0.0018	3.9659
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	4	0.0271	0.0007	0	0.0042	0.0009	3.9783
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_zircao	5	0.0265	0.0006	0	0.0005	0	3.9589
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_zircao	1	0.0173	0.0001	0	0.0011	0.0035	3.9825
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_zircao	2	0.0454	0.0013	0.0069	0.0169	0	3.9814
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_zircao	1	0.0492	0.0531	0	0.0034	0.0059	3.9826