

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Tol	WO3	Ta2O5	Sb2O5	Nb2O5	As2O5	P2O5	SnO2	ZrO2	MnO2
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1	2	0.162	0.025	0.001	0.375	0	0	0	0.022	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1	2	0	0	0	0.342	0	0	0.022	0.047	0.0135
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2	2	0.063	0.057	0.014	0.268	0.028	0	0	0.026	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1	2	0	0	0	0.34	0	0.002	0	0.034	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1	2	0.239	0.102	0.018	0.232	0.064	0.009	0	0.033	0.0294
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1	2	0	0.146	0.002	0.429	0	0	0.002	0.113	0.0196
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2	2	0.089	0	0.007	0.54	0	0.014	0.027	0.087	0
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1	2	0.09	0.156	0.037	0.385	0.033	0	0.014	0.027	0.0221
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1	2	0	0.141	0.003	0.069	0.072	0	0	0.141	0
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2	2	0	0.068	0.004	0.134	0	0.022	0.045	0.113	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1	2	0.122	0	0.003	0.163	0	0.021	0.003	0.044	0.0233
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2	2	0	0	0.017	0.092	0	0.024	0	0.003	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1	2	0	0	0.019	0.389	0.028	0.014	0.021	0.025	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1	2	0	0	0	0.352	0.019	0	0.053	0.043	0.0221
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2	2	0.113	0.03	0.013	0.177	0	0	0.026	0.071	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1	2	0.118	0	0.015	0.367	0	0.022	0.033	0.001	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1	2	0.292	0	0	0.109	0.001	0	0	0	0.0502
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1	2	1.249	0	0.015	0.114	0.023	0.008	0.003	0.054	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3	2	0.914	0.176	0.018	0.179	0.015	0	0	0.018	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4	2	0.19	0	0.005	0.21	0	0	0	0.089	0.0331
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5	2	0	0	0	0.146	0	0	0	0.025	0.027
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6	2	0.556	0.059	0	0.139	0.072	0.013	0	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7	2	1.434	0.014	0.024	0.13	0.019	0.046	0	0.237	0.0282
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1	2	1.164	0	0	0.16	0.015	0	0	0.098	0.0784
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3	2	0.254	0	0.005	0.231	0.055	0.018	0	0.032	0.0772
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4	2	0.244	0	0	0.197	0.012	0	0	0	0.0662
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5	2	0.387	0.182	0.004	0.156	0.012	0.013	0.012	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1	2	0.357	0	0	0.179	0	0	0	0.545	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2	2	0.104	0.005	0	0.133	0.003	0	0.007	0.017	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4	2	0.246	0.127	0.024	0.134	0	0	0	0.005	0.038
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5	2	0.522	0.158	0.006	0.102	0.035	0	0	0	0.0208
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2	2	0.119	0.047	0.044	0.171	0	0	0	0.05	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3	2	0.232	0.039	0.012	0.088	0.071	0.038	0	0.117	0.0061
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4	2	0.234	0.187	0.007	0.126	0	0.01	0	0.123	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5	2	0.074	0.07	0	0.17	0.09	0.017	0.015	0.103	0.0674
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1	2	0	0.061	0.013	0.143	0.044	0.01	0.003	0.024	0.0331
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1	2	0	0.128	0.022	0.075	0.012	0.017	0	0.037	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1	2	0.009	0.194	0.006	0.088	0.058	0	0.014	0	0.0037
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2	2	0	0.038	0.008	0.205	0	0	0.008	0	0.0061
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1	2	0	0	0	0.094	0	0	0	0.02	0.0306
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2	2	0	0	0.043	0.16	0	0.022	0.07	0.028	0.0012
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1	2	0.036	0.026	0.016	0.112	0.033	0.033	0	0	0.0061
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4	2	0	0.09	0	0.153	0.021	0.019	0	0.079	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6	2	0.126	0.003	0	0.208	0	0.021	0	0	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7	2	0	0	0	0.094	0.008	0.049	0	0	0.0551
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2	2	0	0	0.007	0.04	0.055	0	0	0.008	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1	2	0.023	0	0	0.251	0.016	0.027	0.032	0	0.0147
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1	2	0	0.153	0.031	0.953	0.043	0	0.019	0.092	0.0355
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2	2	0	0.135	0	0.145	0.02	0	0.027	0.026	0

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Tol	WO3	Ta2O5	Sb2O5	Nb2O5	As2O5	P2O5	SnO2	ZrO2	MnO2
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3	2	0.079	0.047	0	0.168	0	0	0	0.107	0.0061
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4	2	0	0.129	0	0.402	0.05	0	0.037	0	0.0037
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5	2	0	0	0.018	0.424	0	0.048	0.041	0.001	0.0061
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1	2	0	0	0.023	0.188	0.018	0.005	0.002	0.044	0.0061
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1	2	0.126	0	0	0.353	0.036	0.001	0	0.063	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1	2	0.063	0.048	0.013	0.3	0	0	0	0.164	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2	2	0	0.254	0	0.181	0	0	0.022	0.301	0.011
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3	2	0	0.045	0.005	0.174	0	0.032	0.006	0.019	0.0233
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1	2	0	0.05	0	0.242	0.014	0	0.056	0.267	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1	2	0.009	0	0.021	0.171	0	0.009	0	0.049	0.0159
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1	2	0.309	0.13	0	0.986	0	0.002	0.146	0.296	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1	2	0	0.147	0	0.11	0.018	0	0	0.011	0.0049
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2	2	0	0.063	0	0.18	0.035	0.224	0.038	0.018	0.0123
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1	2	0.17	0	0.003	0.279	0.002	0	0	0.016	0.0159
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1	2	0	0	0	0.214	0	0.023	0	0.038	0.0233
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2	2	0	0	0.015	0.251	0.03	0.039	0.007	0.025	0.0429
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3	2	0	0	0.013	0.182	0	0.119	0.041	0.081	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1	2	0	0.039	0.015	0.029	0.048	0.027	0.018	0.043	0.0123
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1	2	0	0	0.023	0.343	0	0	0.014	0.071	0
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1	2	0.127	0.161	0	0.162	0	0	0	0.163	0.0135
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3	2	0.22	0.072	0	0.132	0.013	0.194	0.047	0.068	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5	2	0.316	0	0.039	0.068	0.037	0	0	0.036	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6	2	0	0.031	0	0.169	0.004	0.034	0	0.001	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1	2	0.21	0	0	0.21	0.014	0	0.053	0.046	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2	2	0.345	0	0.023	0.223	0.02	0	0.036	0	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3	2	0.118	0	0	0.191	0.012	0	0	0.026	0.011
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4	2	0.17	0.082	0.007	0.17	0.007	0.023	0	0.024	0.0343

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	TiO2	SiO2	Ni2O3	Co2O3	Fe2O3	Cr2O3	Al2O3	PbO	BaO	ZnO
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1	95.491	0.799	0.0033	0	1.4136	0.011	0.575	0	0.077	0.037
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1	98.864	0.133	0.0133	0.0232	0.5312	0.005	0.108	0	0.082	0.018
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2	98.568	0.154	0	0.0077	0.4957	0.008	0.102	0	0.109	0.012
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1	96.309	0.317	0	0	1.3981	0.077	0.07	0.02	0.178	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1	94.018	0.807	0	0	1.697	0.17	0.268	0	0.136	0.056
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1	97.742	0.036	0.021	0	0.449	0.089	0.001	0.064	0.119	0.04
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2	97.871	0.013	0	0	0.429	0.05	0.021	0	0.126	0.022
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1	96.374	1.434	0.0266	0	0.7513	0.082	0.047	0.017	0.065	0.007
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1	99.652	0.143	0.021	0	0.2345	0.15	0.017	0.017	0.057	0.06
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2	100.827	0.041	0.0011	0.052	0.2512	0.19	0.019	0.03	0.102	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1	95.105	1.153	0.0122	0	0.8857	0.074	0.376	0.109	0.054	0.045
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2	98.617	0.14	0	0	0.4379	0.049	0.037	0.05	0.117	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1	97.026	0.243	0	0	0.5979	0.181	0.073	0	0.076	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1	97.044	0.782	0	0.0277	0.4134	0.146	0.313	0.05	0.09	0.009
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2	93.072	1.624	0	0.0133	1.8571	0.096	0.905	0.002	0.023	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1	93.515	1.196	0	0	1.8293	0.206	0.93	0	0.053	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1	98.981	0.106	0.0089	0	0.2434	0.002	0.038	0	0.129	0.094
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1	95.138	0.281	0.0299	0	1.1169	0.013	0.253	0.045	0.022	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3	94.936	1.534	0	0	0.6368	0	0.268	0	0	0.014
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4	96.372	0.487	0.0077	0.0111	0.5801	0.042	0.499	0	0.071	0.057
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5	96.981	0.467	0.0144	0	0.5646	0.049	0.646	0	0.137	0.012
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6	95.639	0.483	0.0199	0	1.5003	0.033	0.289	0	0.104	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7	93.149	0.902	0	0	1.6359	0.043	0.437	0	0.11	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1	95.75	0.308	0.0122	0	0.6201	0	0.338	0.049	0.086	0.06
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3	93.903	0.872	0.0166	0	2.1549	0.028	0.469	0.1	0.144	0.039
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4	96.554	0.475	0	0	0.878	0.057	0.138	0	0.133	0.171
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5	98.182	0.074	0	0	0.2319	0.028	0.068	0.05	0.117	0.003
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1	96.379	0.485	0.0111	0	0.4657	0.012	0.15	0.076	0.101	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2	97.999	0.165	0	0	0.4423	0.032	0.066	0	0.166	0.024
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4	94.004	0.496	0	0.0066	2.3427	0	0.205	0.034	0.027	0.042
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5	96.7	0.249	0.0166	0	0.3467	0	0.086	0.047	0.061	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2	97.314	0.307	0.0343	0.0111	1.0302	0.015	0.325	0	0.082	0.075
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3	94.139	1.199	0	0.0376	1.5225	0.008	0.509	0	0.078	0.058
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4	97.167	0.427	0.0044	0	1.0658	0	0.204	0	0.045	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5	96.855	0.434	0	0.0011	1.1891	0.028	0.384	0	0.102	0.034
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1	97.373	0.203	0.0531	0	0.1767	0.023	0.099	0.034	0.071	0.029
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1	97.348	1.384	0.0166	0	0.2778	0.009	0.097	0	0.088	0.004
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1	99.248	0.187	0	0.0332	0.22	0.018	0.064	0	0.041	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2	98.834	0.081	0.0011	0	0.1889	0.024	0.198	0.076	0.086	0.018
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1	96.589	0.724	0.0066	0.0443	0.3212	0.009	0.05	0.004	0.084	0.011
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2	96.5	0.737	0.0432	0	0.2723	0.01	0.041	0	0.11	0.047
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1	98.533	0.102	0.0033	0.0354	0.1467	0	0.581	0	0.016	0.009
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4	97.729	0.833	0.0321	0	0.1867	0.009	0.038	0	0.054	0.001
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6	99.076	0.225	0	0	0.1923	0.022	0.303	0.054	0.018	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7	99.687	0.226	0	0.0232	0.6335	0.008	0.241	0	0.029	0.031
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2	93.66	2.426	0	0.0022	1.8882	0	0.875	0	0.086	0.01
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1	95.502	2.239	0	0	0.4545	0.028	0.286	0	0.106	0.004
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1	94.784	1.862	0	0	0.7424	0.041	0.089	0.05	0.058	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2	98.037	0.527	0	0.0255	0.5879	0.013	0.17	0	0.081	0

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	TiO2	SiO2	Ni2O3	Co2O3	Fe2O3	Cr2O3	Al2O3	PbO	BaO	ZnO
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3	98.137	0.203	0	0.0232	0.4545	0.025	0.077	0	0.066	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4	98.307	0.331	0	0.0255	0.6813	0.037	0.298	0	0.075	0.045
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5	93.743	2.526	0.0122	0.031	0.5779	0.07	0.767	0.077	0.138	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1	97.866	0.793	0.0033	0	0.3945	0.045	0.074	0	0.133	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1	96.154	0.758	0	0	0.6201	0.121	0.235	0.05	0.216	0.009
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1	98.573	0.194	0.0055	0.0376	0.4701	0	0.047	0.05	0.112	0.087
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2	96.567	0.764	0	0.0188	0.3078	0.007	0.049	0.008	0.132	0.004
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3	96.736	0.769	0	0.0221	0.3979	0.131	0.19	0.004	0.123	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1	97.819	0.134	0.0155	0.0077	0.399	0.007	0.056	0.056	0	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1	93.659	3.409	0.0166	0.0742	0.5535	0.12	0.323	0.004	0.041	0.063
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1	95.678	0.704	0	0	0.8013	0.028	0.228	0	0.012	0.078
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1	97.771	0.829	0	0	0.3667	0	0.011	0	0.041	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2	95.152	0.868	0.0188	0	0.9146	0.236	0.875	0.087	0.111	0.025
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1	94.607	3.381	0	0	0.6935	0.044	0.772	0.066	0.071	0.066
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1	98.565	0.265	0	0.0354	0.3879	0	0.057	0	0.087	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2	98.954	0.255	0.0199	0	0.4523	0.032	0.075	0.043	0.116	0.004
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3	97.135	0.438	0	0	0.509	0.17	0.345	0	0	0.043
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1	99.146	0.127	0	0.0199	0.339	0.021	0.037	0.03	0.08	0.083
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1	95.141	1.393	0.0376	0	0.6546	0.046	0.745	0	0.107	0.037
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1	98.584	0.16	0.0487	0	0.3756	0.003	0.047	0.062	0.055	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3	92.544	0.99	0	0.0177	3.8453	0.017	0.624	0	0.103	0.097
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5	97.925	0.112	0	0	0	0.008	0.005	0	0.119	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6	98.315	0.062	0.0365	0	0.1367	0	0.073	0.037	0.069	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1	98.949	0.051	0.0487	0	0.0515	0.012	0.076	0	0.069	0.048
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2	98.724	0.068	0.031	0	0.12	0.015	0.166	0.028	0.031	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3	99.3	0.035	0.0199	0	0.0478	0	0.088	0.039	0.024	0.029
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4	98.067	0.061	0.0199	0	0.8157	0.017	0.136	0	0.082	0.058

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	CuO	NiO	CoO	FeO	MnO	CaO	MgO	K2O	Na2O	Total
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1	0.04	0	0	0	0	0.007	0.329	0.009	0.011	99.388
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1	0	0	0	0	0	0.031	0.034	0.019	0.018	100.3042
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2	0.007	0	0	0	0	0.046	0.027	0.01	0.006	100.0084
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1	0.005	0	0	0	0	0.053	0.007	0.077	0.009	98.8961
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1	0	0	0	0	0	0.064	0.062	0.234	0.046	98.2844
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1	0.017	0	0	0	0	0.007	0	0.043	0	99.3396
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2	0.041	0	0	0	0	0.01	0.004	0.035	0.011	99.397
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1	0.007	0	0	0	0	0.028	0.002	0.12	0	99.7249
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1	0.002	0	0	0	0	0.004	0	0.046	0.003	100.8325
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2	0.01	0	0	0	0	0.003	0	0.046	0.032	101.9903
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1	0.024	0	0	0	0	0.159	0.203	0.089	0	98.6682
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2	0.043	0	0	0	0	0.016	0.001	0.088	0.011	99.7429
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1	0	0	0	0	0	0.209	0.013	0.135	0.015	99.0649
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1	0	0	0	0	0	0.051	0	0.158	0.003	99.5762
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2	0	0	0	0	0	0.098	0.513	0.185	0.029	98.8473
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1	0.047	0	0	0	0	0.075	0.549	0.097	0.038	99.0913
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1	0	0	0	0	0	0.042	0.01	0.089	0	100.1955
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1	0	0	0	0	0	0.078	0.008	0.105	0	98.5558
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3	0	0	0	0	0	0.034	0	0.04	0.167	98.9498
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4	0	0	0	0	0	0.065	0.002	0.069	0	98.79
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5	0.009	0	0	0	0	0.021	0.018	0.048	0.023	99.1879
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6	0	0	0	0	0	0.078	0	0	0.016	99.0012
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7	0	0	0	0	0	0.097	0.043	0.1	0.115	98.5641
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1	0	0	0	0	0	0.08	0.02	0.181	0.024	99.0437
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3	0.01	0	0	0	0	0.175	0.036	0.146	0.009	98.7747
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4	0	0	0	0	0	0.168	0.041	0.056	0.014	99.2041
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5	0.017	0	0	0.0213	0	0.033	0	0.071	0.027	99.6892
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1	0	0	0	0	0	0.06	0.005	0.066	0.039	98.9307
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2	0	0	0	0	0	0.05	0	0.045	0.029	99.2873
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4	0.014	0	0	0	0	0.242	0.014	0.019	0.008	98.0284
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5	0	0	0	0	0	0.116	0.007	0.025	0.019	98.5172
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2	0	0	0	0	0	0.042	0	0.022	0.031	99.7196
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3	0	0	0	0	0	0.13	0.251	0.044	0	98.5793
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4	0.027	0	0	0	0	0.07	0.021	0.027	0.037	99.7822
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5	0.001	0	0	0	0	0.09	0.006	0.038	0.012	99.7807
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1	0.07	0	0	0	0	0.004	0.026	0.138	0.01	98.6409
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1	0.029	0	0	0	0	0.031	0.038	0.148	0	99.7614
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1	0.001	0	0	0	0	0.013	0.02	0.086	0	100.3039
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2	0	0	0	0	0	0.01	0	0.155	0.02	99.9572
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1	0	0	0	0	0	0.053	0.023	0.096	0.069	98.2287
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2	0.004	0	0	0	0	0.044	0.016	0.105	0.063	98.3167
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1	0	0	0	0	0	0.003	0.005	0.118	0.025	99.8396
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4	0.023	0	0	0	0	0.013	0	0.102	0.001	99.3838
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6	0	0	0	0	0	0.019	0.009	0.103	0.009	100.3883
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7	0.014	0	0	0	0	0.037	0	0.094	0.012	101.2419
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2	0	0	0	0	0	0.091	0.29	0.076	0.073	99.5874
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1	0.019	0	0	0	0	0.027	0.025	0.182	0.014	99.2502
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1	0	0	0	0	0	0.033	0.007	0.168	0.014	99.1749
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2	0.039	0	0	0	0	0.02	0.04	0.08	0	99.9734

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	CuO	NiO	CoO	FeO	MnO	CaO	MgO	K2O	Na2O	Total
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3	0.01	0	0	0	0	0.033	0.028	0.077	0.127	99.6679
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4	0	0	0	0	0	0.042	0.081	0.087	0.034	100.6654
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5	0	0	0	0	0	0.025	0.075	0.147	0.003	98.7302
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1	0	0	0	0	0	0.018	0.017	0.052	0.005	99.687
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1	0	0	0	0	0	0.043	0.008	0.165	0.016	98.9741
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1	0.027	0	0	0	0	0	0	0.045	0.015	100.2513
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2	0	0	0	0	0	0.026	0.282	0.056	0	98.9907
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3	0	0	0	0	0	0.046	0.138	0.047	0.003	98.9113
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1	0.016	0	0	0	0	0.008	0.001	0.141	0.004	99.2932
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1	0	0	0	0	0	0.024	0.328	0.226	0.009	99.1251
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1	0.012	0	0	0	0	0.02	0.012	0.121	0.07	99.6333
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1	0	0	0	0	0	0.05	0.008	0.083	0	99.4506
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2	0.02	0	0	0	0	0.124	0.177	0.136	0.018	99.3327
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1	0.015	0	0	0	0	0.077	0.109	0.178	0.025	100.5904
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1	0.001	0	0	0	0	0.096	0.018	0.042	0	99.8526
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2	0	0	0	0	0	0.123	0.019	0.067	0.035	100.6051
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3	0	0	0	0	0	0.105	0.044	0.192	0	99.417
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1	0.036	0	0	0	0	0.001	0	0.075	0.002	100.2281
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1	0	0	0	0	0	0.02	0.075	0.348	0.016	99.0712
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1	0.039	0	0	0	0	0.025	0.02	0.03	0.009	100.0848
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3	0	0	0	0	0	0.2	0.016	0.038	0.034	99.272
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5	0.02	0.017	0.006	0.064	0.011	0.102	0.001	0.019	0.023	98.928
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6	0.006	0	0	0	0	0.095	0	0.003	0.025	99.0972
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1	0.005	0	0	0.0227	0	0.131	0	0.021	0.026	100.0439
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2	0.01	0	0	0	0	0.096	0	0.023	0.017	99.976
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3	0.02	0	0	0	0	0.119	0.012	0.005	0.001	100.0977
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4	0	0	0	0	0	0.13	0	0	0.001	99.905

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Group	W6+	Ta5+	Sb5+	Nb5+	As5+	P5+	Sn4+	Zr4+
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1		0.0006	0.0001	0	0.0023	0	0	0	0.0001
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1		0	0	0	0.0021	0	0	0.0001	0.0003
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2		0.0002	0.0002	0.0001	0.0016	0.0002	0	0	0.0002
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1		0	0	0	0.0021	0	0	0	0.0002
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1		0.0008	0.0004	0.0001	0.0014	0.0005	0.0001	0	0.0002
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1		0	0.0005	0	0.0026	0	0	0	0.0007
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2		0.0003	0	0	0.0033	0	0.0002	0.0001	0.0006
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1		0.0003	0.0006	0.0002	0.0023	0.0002	0	0.0001	0.0002
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1		0	0.0005	0	0.0004	0.0005	0	0	0.0009
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2		0	0.0002	0	0.0008	0	0.0002	0.0002	0.0007
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1		0.0004	0	0	0.001	0	0.0002	0	0.0003
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2		0	0	0.0001	0.0006	0	0.0003	0	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1		0	0	0.0001	0.0024	0.0002	0.0002	0.0001	0.0002
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1		0	0	0	0.0021	0.0001	0	0.0003	0.0003
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2		0.0004	0.0001	0.0001	0.0011	0	0	0.0001	0.0005
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1		0.0004	0	0.0001	0.0022	0	0.0003	0.0002	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1		0.001	0	0	0.0007	0	0	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1		0.0044	0	0.0001	0.0007	0.0002	0.0001	0	0.0004
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3		0.0032	0.0006	0.0001	0.0011	0.0001	0	0	0.0001
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4		0.0007	0	0	0.0013	0	0	0	0.0006
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5		0	0	0	0.0009	0	0	0	0.0002
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6		0.0019	0.0002	0	0.0008	0.0005	0.0001	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7		0.0051	0.0001	0.0001	0.0008	0.0001	0.0005	0	0.0016
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1		0.0041	0	0	0.001	0.0001	0	0	0.0006
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3		0.0009	0	0	0.0014	0.0004	0.0002	0	0.0002
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4		0.0009	0	0	0.0012	0.0001	0	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5		0.0013	0.0007	0	0.0009	0.0001	0.0001	0.0001	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1		0.0013	0	0	0.0011	0	0	0	0.0036
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2		0.0004	0	0	0.0008	0	0	0	0.0001
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4		0.0009	0.0005	0.0001	0.0008	0	0	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5		0.0018	0.0006	0	0.0006	0.0002	0	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2		0.0004	0.0002	0.0002	0.001	0	0	0	0.0003
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3		0.0008	0.0001	0.0001	0.0005	0.0005	0.0004	0	0.0008
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4		0.0008	0.0007	0	0.0008	0	0.0001	0	0.0008
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5		0.0003	0.0003	0	0.001	0.0006	0.0002	0.0001	0.0007
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1		0	0.0002	0.0001	0.0009	0.0003	0.0001	0	0.0002
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1		0	0.0005	0.0001	0.0005	0.0001	0.0002	0	0.0002
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1		0	0.0007	0	0.0005	0.0004	0	0.0001	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2		0	0.0001	0	0.0012	0	0	0	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1		0	0	0	0.0006	0	0	0	0.0001
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2		0	0	0.0002	0.001	0	0.0003	0.0004	0.0002
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1		0.0001	0.0001	0.0001	0.0007	0.0002	0.0004	0	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4		0	0.0003	0	0.0009	0.0001	0.0002	0	0.0005
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6		0.0004	0	0	0.0012	0	0.0002	0	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7		0	0	0	0.0006	0.0001	0.0005	0	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2		0	0	0	0.0002	0.0004	0	0	0.0001
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1		0.0001	0	0	0.0015	0.0001	0.0003	0.0002	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1		0	0.0006	0.0002	0.0058	0.0003	0	0.0001	0.0006
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2		0	0.0005	0	0.0009	0.0001	0	0.0001	0.0002

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Group	W6+	Ta5+	Sb5+	Nb5+	As5+	P5+	Sn4+	Zr4+
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3		0.0003	0.0002	0	0.001	0	0	0	0.0007
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4		0	0.0005	0	0.0024	0.0003	0	0.0002	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5		0	0	0.0001	0.0026	0	0.0005	0.0002	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1		0	0	0.0001	0.0011	0.0001	0.0001	0	0.0003
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1		0.0004	0	0	0.0022	0.0003	0	0	0.0004
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1		0.0002	0.0002	0.0001	0.0018	0	0	0	0.0011
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2		0	0.0009	0	0.0011	0	0	0.0001	0.002
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3		0	0.0002	0	0.0011	0	0.0004	0	0.0001
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1		0	0.0002	0	0.0015	0.0001	0	0.0003	0.0018
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1		0	0	0.0001	0.001	0	0.0001	0	0.0003
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1		0.0011	0.0005	0	0.006	0	0	0.0008	0.0019
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1		0	0.0005	0	0.0007	0.0001	0	0	0.0001
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2		0	0.0002	0	0.0011	0.0002	0.0026	0.0002	0.0001
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1		0.0006	0	0	0.0017	0	0	0	0.0001
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1		0	0	0	0.0013	0	0.0003	0	0.0002
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2		0	0	0.0001	0.0015	0.0002	0.0004	0	0.0002
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3		0	0	0.0001	0.0011	0	0.0014	0.0002	0.0005
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1		0	0.0001	0.0001	0.0002	0.0003	0.0003	0.0001	0.0003
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1		0	0	0.0001	0.0021	0	0	0.0001	0.0005
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1		0.0004	0.0006	0	0.001	0	0	0	0.0011
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3		0.0008	0.0003	0	0.0008	0.0001	0.0022	0.0003	0.0004
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5		0.0011	0	0.0002	0.0004	0.0003	0	0	0.0002
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6		0	0.0001	0	0.001	0	0.0004	0	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1		0.0007	0	0	0.0013	0.0001	0	0.0003	0.0003
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2		0.0012	0	0.0001	0.0013	0.0001	0	0.0002	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3		0.0004	0	0	0.0012	0.0001	0	0	0.0002
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4		0.0006	0.0003	0	0.001	0	0.0003	0	0.0002

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Mn4+	Ti4+	Si4+	Ni3+	Co3+	Fe3+	Cr3+	Al3+	Pb2+	Ni2+
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1	0	0.9676	0.0108	0	0	0.0143	0.0001	0.0091	0	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1	0.0001	0.9896	0.0018	0.0001	0.0002	0.0053	0.0001	0.0017	0	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2	0	0.9898	0.0021	0	0.0001	0.005	0.0001	0.0016	0	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1	0	0.9807	0.0043	0	0	0.0142	0.0008	0.0011	0.0001	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1	0.0003	0.9664	0.011	0	0	0.0174	0.0018	0.0043	0	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1	0.0002	0.9902	0.0005	0.0002	0	0.0045	0.0009	0	0.0002	0
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2	0	0.9904	0.0002	0	0	0.0043	0.0005	0.0003	0	0
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1	0.0002	0.9687	0.0192	0.0003	0	0.0076	0.0009	0.0007	0.0001	0
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1	0	0.9921	0.0019	0.0002	0	0.0023	0.0016	0.0003	0.0001	0
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2	0	0.9929	0.0005	0	0.0005	0.0025	0.002	0.0003	0.0001	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1	0.0002	0.9695	0.0156	0.0001	0	0.009	0.0008	0.006	0.0004	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2	0	0.9927	0.0019	0	0	0.0044	0.0005	0.0006	0.0002	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1	0	0.986	0.0033	0	0	0.0061	0.0019	0.0012	0	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1	0.0002	0.9777	0.0105	0	0.0003	0.0042	0.0015	0.0049	0.0002	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2	0	0.9493	0.022	0	0.0001	0.0189	0.001	0.0145	0	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1	0	0.953	0.0162	0	0	0.0186	0.0022	0.0148	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1	0.0005	0.9934	0.0014	0.0001	0	0.0024	0	0.0006	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1	0	0.9758	0.0038	0.0003	0	0.0115	0.0001	0.0041	0.0002	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3	0	0.9639	0.0207	0	0	0.0065	0	0.0043	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4	0.0003	0.979	0.0066	0.0001	0.0001	0.0059	0.0004	0.0079	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5	0.0003	0.9798	0.0063	0.0001	0	0.0057	0.0005	0.0102	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6	0	0.9731	0.0065	0.0002	0	0.0153	0.0004	0.0046	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7	0.0003	0.9579	0.0123	0	0	0.0168	0.0005	0.007	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1	0.0007	0.9779	0.0042	0.0001	0	0.0063	0	0.0054	0.0002	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3	0.0007	0.9606	0.0119	0.0002	0	0.0221	0.0003	0.0075	0.0004	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4	0.0006	0.9813	0.0064	0	0	0.0089	0.0006	0.0022	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5	0	0.9916	0.001	0	0	0.0023	0.0003	0.0011	0.0002	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1	0	0.9809	0.0066	0.0001	0	0.0047	0.0001	0.0024	0.0003	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2	0	0.9916	0.0022	0	0	0.0045	0.0003	0.001	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4	0.0004	0.969	0.0068	0	0.0001	0.0242	0	0.0033	0.0001	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5	0.0002	0.9879	0.0034	0.0002	0	0.0035	0	0.0014	0.0002	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2	0	0.9811	0.0041	0.0003	0.0001	0.0104	0.0002	0.0051	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3	0.0001	0.9614	0.0163	0	0.0004	0.0156	0.0001	0.0081	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4	0	0.9798	0.0057	0	0	0.0107	0	0.0032	0	0
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5	0.0006	0.976	0.0058	0	0	0.012	0.0003	0.0061	0	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1	0.0003	0.9916	0.0027	0.0005	0	0.0018	0.0002	0.0016	0.0001	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1	0	0.9763	0.0184	0.0002	0	0.0028	0.0001	0.0015	0	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1	0	0.9925	0.0025	0	0.0003	0.0022	0.0002	0.001	0	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2	0.0001	0.993	0.0011	0	0	0.0019	0.0003	0.0031	0.0003	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1	0.0003	0.9855	0.0098	0.0001	0.0004	0.0033	0.0001	0.0008	0	0
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2	0	0.9846	0.01	0.0004	0	0.0028	0.0001	0.0007	0	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1	0.0001	0.9884	0.0014	0	0.0003	0.0015	0	0.0091	0	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4	0	0.9841	0.0112	0.0003	0	0.0019	0.0001	0.0006	0	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6	0	0.9892	0.003	0	0	0.0019	0.0002	0.0047	0.0002	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7	0.0005	0.9873	0.003	0	0.0002	0.0063	0.0001	0.0037	0	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2	0	0.9421	0.0324	0	0	0.019	0	0.0138	0	0
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1	0.0001	0.9602	0.0299	0	0	0.0046	0.0003	0.0045	0	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1	0.0003	0.9583	0.025	0	0	0.0075	0.0004	0.0014	0.0002	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2	0	0.9841	0.007	0	0.0002	0.0059	0.0001	0.0027	0	0

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Mn4+	Ti4+	Si4+	Ni3+	Co3+	Fe3+	Cr3+	Al3+	Pb2+	Ni2+
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3	0.0001	0.9899	0.0027	0	0.0002	0.0046	0.0003	0.0012	0	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4	0	0.9823	0.0044	0	0.0002	0.0068	0.0004	0.0047	0	0
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5	0.0001	0.9473	0.0339	0.0001	0.0003	0.0058	0.0007	0.0121	0.0003	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1	0.0001	0.983	0.0106	0	0	0.004	0.0005	0.0012	0	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1	0	0.9771	0.0102	0	0	0.0063	0.0013	0.0037	0.0002	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1	0	0.989	0.0026	0.0001	0.0004	0.0047	0	0.0007	0.0002	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2	0.0001	0.9818	0.0103	0	0.0002	0.0031	0.0001	0.0008	0	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3	0.0002	0.9807	0.0104	0	0.0002	0.004	0.0014	0.003	0	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1	0	0.9899	0.0018	0.0002	0.0001	0.004	0.0001	0.0009	0.0002	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1	0.0001	0.9427	0.0456	0.0002	0.0007	0.0056	0.0013	0.0051	0	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1	0	0.969	0.0095	0	0	0.0081	0.0003	0.0036	0	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1	0	0.9842	0.0111	0	0	0.0037	0	0.0002	0	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2	0.0001	0.9632	0.0117	0.0002	0	0.0093	0.0025	0.0139	0.0003	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1	0.0001	0.9376	0.0445	0	0	0.0069	0.0005	0.012	0.0002	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1	0.0002	0.9902	0.0035	0	0.0003	0.0039	0	0.0009	0	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2	0.0004	0.9885	0.0034	0.0002	0	0.0045	0.0003	0.0012	0.0002	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3	0	0.9809	0.0059	0	0	0.0051	0.0018	0.0055	0	0
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1	0.0001	0.9932	0.0017	0	0.0002	0.0034	0.0002	0.0006	0.0001	0
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1	0	0.9635	0.0188	0.0004	0	0.0066	0.0005	0.0118	0	0
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1	0.0001	0.9902	0.0021	0.0005	0	0.0038	0	0.0007	0.0002	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3	0	0.9433	0.0134	0	0.0002	0.0392	0.0002	0.01	0	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5	0	0.9948	0.0015	0	0	0	0.0001	0.0001	0	0.0002
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6	0	0.995	0.0008	0.0004	0	0.0014	0	0.0012	0.0001	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1	0	0.9941	0.0007	0.0005	0	0.0005	0.0001	0.0012	0	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2	0	0.9919	0.0009	0.0003	0	0.0012	0.0002	0.0026	0.0001	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3	0.0001	0.9955	0.0005	0.0002	0	0.0005	0	0.0014	0.0001	0
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4	0.0003	0.9877	0.0008	0.0002	0	0.0082	0.0002	0.0021	0	0

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Co2+	Fe2+	Mn2+	Total	Group	Ba2+	Zn2+	Cu2+	Ca2+
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1	0	0	0	1.005		0.0004	0.0004	0.0004	0.0001
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1	0	0	0	1.0013		0.0004	0.0002	0	0.0004
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2	0	0	0	1.0011		0.0006	0.0001	0.0001	0.0007
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1	0	0	0	1.0036		0.0009	0	0.0001	0.0008
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1	0	0	0	1.0049		0.0007	0.0006	0	0.0009
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1	0	0	0	1.0008		0.0006	0.0004	0.0002	0.0001
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2	0	0	0	1.0003		0.0007	0.0002	0.0004	0.0001
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1	0	0	0	1.0014		0.0003	0.0001	0.0001	0.0004
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1	0	0	0	1.0008		0.0003	0.0006	0	0.0001
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2	0	0	0	1.001		0.0005	0	0.0001	0
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1	0	0	0	1.0037		0.0003	0.0005	0.0002	0.0023
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2	0	0	0	1.0012		0.0006	0	0.0004	0.0002
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1	0	0	0	1.0016		0.0004	0	0	0.003
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1	0	0	0	1.0023		0.0005	0.0001	0	0.0007
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2	0	0	0	1.0081		0.0001	0	0	0.0014
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1	0	0	0	1.0081		0.0003	0	0.0005	0.0011
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1	0	0	0	1.0001		0.0007	0.0009	0	0.0006
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1	0	0	0	1.0016		0.0001	0	0	0.0011
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3	0	0	0	1.0006		0	0.0001	0	0.0005
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4	0	0	0	1.003		0.0004	0.0006	0	0.0009
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5	0	0	0	1.0039		0.0007	0.0001	0.0001	0.0003
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6	0	0	0	1.0037		0.0006	0	0	0.0011
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7	0	0	0	1.0031		0.0006	0	0	0.0014
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1	0	0	0	1.0007		0.0005	0.0006	0	0.0012
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3	0	0	0	1.0067		0.0008	0.0004	0.0001	0.0025
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4	0	0	0	1.0022		0.0007	0.0017	0	0.0024
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5	0	0.0002	0	1		0.0006	0	0.0002	0.0005
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1	0	0	0	1.0011		0.0005	0	0	0.0009
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2	0	0	0	1.0011		0.0009	0.0002	0	0.0007
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4	0	0	0	1.0062		0.0001	0.0004	0.0001	0.0036
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5	0	0	0	1.0001		0.0003	0	0	0.0017
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2	0	0	0	1.0035		0.0004	0.0007	0	0.0006
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3	0	0	0	1.0052		0.0004	0.0006	0	0.0019
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4	0	0	0	1.0027		0.0002	0	0.0003	0.001
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5	0	0	0	1.0039		0.0005	0.0003	0	0.0013
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1	0	0	0	1.0007		0.0004	0.0003	0.0007	0.0001
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1	0	0	0	1.0008		0.0005	0	0.0003	0.0004
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1	0	0	0	1.0005		0.0002	0	0	0.0002
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2	0	0	0	1.0011		0.0005	0.0002	0	0.0001
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1	0	0	0	1.001		0.0004	0.0001	0	0.0008
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2	0	0	0	1.0006		0.0006	0.0005	0	0.0006
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1	0	0	0	1.0023		0.0001	0.0001	0	0
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4	0	0	0	1.0003		0.0003	0	0.0002	0.0002
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6	0	0	0	1.0012		0.0001	0	0	0.0003
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7	0	0	0	1.0023		0.0001	0.0003	0.0001	0.0005
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2	0	0	0	1.008		0.0005	0.0001	0	0.0013
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1	0	0	0	1.0018		0.0006	0	0.0002	0.0004
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1	0	0	0	1.0007		0.0003	0	0	0.0005
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2	0	0	0	1.0019		0.0004	0	0.0004	0.0003

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Co2+	Fe2+	Mn2+	Total	Group	Ba2+	Zn2+	Cu2+	Ca2+
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3	0	0	0	1.0011		0.0003	0	0.0001	0.0005
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4	0	0	0	1.0022		0.0004	0.0004	0	0.0006
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5	0	0	0	1.0041		0.0007	0	0	0.0004
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1	0	0	0	1.0011		0.0007	0	0	0.0003
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1	0	0	0	1.0021		0.0011	0.0001	0	0.0006
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1	0	0	0	1.0009		0.0006	0.0009	0.0003	0
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2	0	0	0	1.0005		0.0007	0	0	0.0004
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3	0	0	0	1.0018		0.0006	0	0	0.0007
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1	0	0	0	1.001		0	0	0.0002	0.0001
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1	0	0	0	1.0029		0.0002	0.0006	0	0.0003
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1	0	0	0	1.0008		0.0001	0.0008	0.0001	0.0003
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1	0	0	0	1.0006		0.0002	0	0	0.0007
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2	0	0	0	1.0056		0.0006	0.0002	0.0002	0.0018
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1	0	0	0	1.0042		0.0004	0.0006	0.0001	0.0011
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1	0	0	0	1.0009		0.0005	0	0	0.0014
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2	0	0	0	1.0011		0.0006	0	0	0.0017
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3	0	0	0	1.0025		0	0.0004	0	0.0015
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1	0	0	0	1.0009		0.0004	0.0008	0.0004	0
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1	0	0	0	1.0043		0.0006	0.0004	0	0.0003
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1	0	0	0	1.0008		0.0003	0	0.0004	0.0004
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3	0	0	0	1.0111		0.0005	0.001	0	0.0029
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5	0.0001	0.0007	0.0001	0.9998		0.0006	0	0.0002	0.0015
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6	0	0	0	1.0004		0.0004	0	0.0001	0.0014
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1	0	0.0003	0	1		0.0004	0.0005	0.0001	0.0019
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2	0	0	0	1.0001		0.0002	0	0.0001	0.0014
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3	0	0	0	1.0001		0.0001	0.0003	0.0002	0.0017
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4	0	0	0	1.002		0.0004	0.0006	0	0.0019

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Mg2+	K+	Na+	Total	Group	Tripuhyte	VFe	Rutile	Total
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1	0.0066	0.0002	0.0003	0.0083		0	0	96.7568	96.7568
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1	0.0007	0.0003	0.0005	0.0025		0	0	98.9551	98.9551
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2	0.0005	0.0002	0.0002	0.0023		0	0	98.978	98.978
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1	0.0001	0.0013	0.0002	0.0035		0	0	98.0684	98.0684
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1	0.0013	0.0041	0.0012	0.0088		1.1754	1.1572	96.6425	98.9751
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1	0	0.0007	0	0.002		0	0	99.0229	99.0229
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2	0.0001	0.0006	0.0003	0.0024		0	0	99.0392	99.0392
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1	0	0.002	0	0.003		0	0	96.8693	96.8693
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1	0	0.0008	0.0001	0.0018		0	0	99.2097	99.2097
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2	0	0.0008	0.0008	0.0022		0	0	99.2904	99.2904
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1	0.0041	0.0015	0	0.0089		0	0	96.9481	96.9481
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2	0	0.0015	0.0003	0.0031		0	0	99.2743	99.2743
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1	0.0003	0.0023	0.0004	0.0064		0	0	98.6024	98.6024
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1	0	0.0027	0.0001	0.0041		0	0	97.765	97.765
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2	0.0104	0.0032	0.0008	0.0159		1.2718	1.2587	94.9274	97.4578
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1	0.0111	0.0017	0.001	0.0156		1.2532	1.2381	95.2998	97.7911
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1	0.0002	0.0015	0	0.0039		0	0	99.3417	99.3417
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1	0.0002	0.0018	0	0.0032		0	0	97.5827	97.5827
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3	0	0.0007	0.0044	0.0057		0	0	96.3918	96.3918
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4	0	0.0012	0	0.0031		0	0	97.9046	97.9046
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5	0.0004	0.0008	0.0006	0.003		0	0	97.9764	97.9764
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6	0	0	0.0004	0.0021		0	0	97.3071	97.3071
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7	0.0009	0.0017	0.003	0.0077		1.1381	1.1137	95.7899	98.0416
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1	0.0004	0.0031	0.0006	0.0064		0	0	97.7943	97.7943
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3	0.0007	0.0025	0.0002	0.0073		1.4734	1.4683	96.0602	99.0019
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4	0.0008	0.001	0.0004	0.007		0	0	98.1276	98.1276
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5	0	0.0012	0.0007	0.0032		0	0	99.1597	99.1597
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1	0.0001	0.0011	0.001	0.0037		0	0	98.0932	98.0932
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2	0	0.0008	0.0008	0.0034		0	0	99.163	99.163
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4	0.0003	0.0003	0.0002	0.0051		1.6246	1.6002	96.7753	100
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5	0.0001	0.0004	0.0005	0.0031		0	0	98.7908	98.7908
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2	0	0.0004	0.0008	0.003		0	0	98.1065	98.1065
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3	0.0051	0.0008	0	0.0087		1.045	1.0329	96.1445	98.2224
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4	0.0004	0.0005	0.001	0.0034		0	0	97.9751	97.9751
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5	0.0001	0.0006	0.0003	0.0033		0	0	97.6023	97.6023
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1	0.0005	0.0024	0.0003	0.0046		0	0	99.1606	99.1606
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1	0.0008	0.0025	0	0.0045		0	0	97.626	97.626
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1	0.0004	0.0015	0	0.0023		0	0	99.2497	99.2497
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2	0	0.0026	0.0005	0.0039		0	0	99.2954	99.2954
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1	0.0005	0.0017	0.0018	0.0053		0	0	98.5528	98.5528
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2	0.0003	0.0018	0.0017	0.0055		0	0	98.4641	98.4641
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1	0.0001	0.002	0.0006	0.003		0	0	98.8351	98.8351
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4	0	0.0017	0	0.0025		0	0	98.4149	98.4149
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6	0.0002	0.0017	0.0002	0.0025		0	0	98.9231	98.9231
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7	0	0.0016	0.0003	0.003		0	0	98.7332	98.7332
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2	0.0058	0.0013	0.0019	0.0108		1.2711	1.2642	94.2081	96.7434
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1	0.0005	0.0031	0.0004	0.0051		0	0	96.0205	96.0205
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1	0.0001	0.0029	0.0004	0.0042		0	0	95.8328	95.8328
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2	0.0008	0.0014	0	0.0033		0	0	98.4057	98.4057

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Mg2+	K+	Na+	Total	Group	Tripuhyte	VFe	Rutile	Total
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3	0.0006	0.0013	0.0033	0.0061		0	0	98.9903	98.9903
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4	0.0016	0.0015	0.0009	0.0054		0	0	98.2261	98.2261
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5	0.0015	0.0025	0.0001	0.0052		0	0	94.7276	94.7276
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1	0.0003	0.0009	0.0001	0.0023		0	0	98.3043	98.3043
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1	0.0002	0.0028	0.0004	0.0053		0	0	97.7066	97.7066
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1	0	0.0008	0.0004	0.0029		0	0	98.8966	98.8966
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2	0.0057	0.001	0	0.0078		0	0	98.1779	98.1779
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3	0.0028	0.0008	0.0001	0.005		0	0	98.0739	98.0739
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1	0	0.0024	0.0001	0.0028		0	0	98.9932	98.9932
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1	0.0065	0.0039	0.0002	0.0118		0	0	94.2708	94.2708
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1	0.0002	0.0021	0.0018	0.0054		0	0	96.9029	96.9029
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1	0.0002	0.0014	0	0.0025		0	0	98.4232	98.4232
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2	0.0036	0.0023	0.0005	0.0092		0	0	96.3199	96.3199
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1	0.0021	0.003	0.0006	0.008		0	0	93.7623	93.7623
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1	0.0004	0.0007	0	0.0029		0	0	99.0206	99.0206
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2	0.0004	0.0011	0.0009	0.0048		0	0	98.8494	98.8494
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3	0.0009	0.0033	0	0.0061		0	0	98.0916	98.0916
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1	0	0.0013	0.0001	0.0029		0	0	99.3189	99.3189
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1	0.0015	0.006	0.0004	0.0091		0	0	96.3474	96.3474
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1	0.0004	0.0005	0.0002	0.0022		0	0	99.0192	99.0192
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3	0.0003	0.0007	0.0009	0.0063		2.6138	2.6138	94.3339	99.5615
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5	0	0.0003	0.0006	0.0033		0	0	99.4829	99.4829
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6	0	0.0001	0.0007	0.0025		0	0	99.4973	99.4973
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1	0	0.0004	0.0007	0.0038		0	0	99.4079	99.4079
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2	0	0.0004	0.0004	0.0025		0	0	99.185	99.185
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3	0.0002	0.0001	0	0.0027		0	0	99.5498	99.5498
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4	0	0	0	0.0029		0	0	98.7682	98.7682

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Group	M_Fe3+	M_Ti4+	M_Mn4+	M_Sn4+	M_Sb5+	M_V5+	Total
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_1_oxidoT	1		-0.0143	0	0	0	0	0	0.0143
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	1		-0.0053	0	-0.0001	-0.0001	0	0	0.0053
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_6_oxidoT	2		-0.005	0	0	0	-0.0001	0	0.005
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_7_oxidoT	1		-0.0142	0	0	0	0	0	0.0142
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_8_oxidoT	1		-0.0058	0	-0.0003	0	0.0058	0.0058	0.01
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	1		-0.0045	0	-0.0002	0	0	0	0.0045
MOSTMEG	MT#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#12_9_oxidoT	2		-0.0043	0	0	-0.0001	0	0	0.0043
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_2_oxidoll	1		-0.0076	0	-0.0002	-0.0001	-0.0002	0	0.0076
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	1		-0.0023	0	0	0	0	0	0.0023
MOSTMEG	MT#1	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#1_5_oxidoTi	2		-0.0025	0	0	-0.0002	0	0	0.0025
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	1		-0.009	0	-0.0002	0	0	0	0.009
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_4_oxidoTi	2		-0.0044	0	0	0	-0.0001	0	0.0044
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_5_oxidoTi	1		-0.0061	0	0	-0.0001	-0.0001	0	0.0061
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	1		-0.0042	0	-0.0002	-0.0003	0	0	0.0042
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_6_oxidoTi	2		-0.0063	0	0	-0.0001	0.0063	0.0063	0.0109
MOSTMEG	MT#9	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-MT#9_8_oxidoTi	1		-0.0062	0	0	-0.0002	0.0062	0.0062	0.0107
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_1_TiOx	1		-0.0024	0	-0.0005	0	0	0	0.0025
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	1		-0.0115	0	0	0	-0.0001	0	0.0115
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	3		-0.0065	0	0	0	-0.0001	0	0.0065
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	4		-0.0059	0	-0.0003	0	0	0	0.0059
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	5		-0.0057	0	-0.0003	0	0	0	0.0057
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	6		-0.0153	0	0	0	0	0	0.0153
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_2_TiOx	7		-0.0056	0	-0.0003	0	0.0056	0.0056	0.0096
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	1		-0.0063	0	-0.0007	0	0	0	0.0064
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	3		-0.0073	0	-0.0007	0	0.0073	0.0073	0.0127
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	4		-0.0089	0	-0.0006	0	0	0	0.0089
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_3_TiOx	5		-0.0023	0	0	-0.0001	0	0	0.0023
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	1		-0.0047	0	0	0	0	0	0.0047
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	2		-0.0045	0	0	0	0	0	0.0045
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	4		-0.008	-0.0013	-0.0004	0	0.008	0.008	0.0139
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_4_TiOx	5		-0.0035	0	-0.0002	0	0	0	0.0035
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	2		-0.0104	0	0	0	-0.0002	0	0.0104
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	3		-0.0052	0	-0.0001	0	0.0052	0.0052	0.0089
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	4		-0.0107	0	0	0	0	0	0.0107
MOSTMEG	MT#10	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-MT10_7_TiOx	5		-0.012	0	-0.0006	-0.0001	0	0	0.012
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_1_oxidoTi	1		-0.0018	0	-0.0003	0	-0.0001	0	0.0018
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_2_oxidoTi	1		-0.0028	0	0	0	-0.0001	0	0.0028
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	1		-0.0022	0	0	-0.0001	0	0	0.0022
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_3_oxidoTi	2		-0.0019	0	-0.0001	0	0	0	0.0019
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	1		-0.0033	0	-0.0003	0	0	0	0.0033
MOSTMEG	P#12	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P#12_5_oxidoTi	2		-0.0028	0	0	-0.0004	-0.0002	0	0.0028
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	1		-0.0015	0	-0.0001	0	-0.0001	0	0.0015
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_4_TiOx	4		-0.0019	0	0	0	0	0	0.0019
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	6		-0.0019	0	0	0	0	0	0.0019
MOSTMEG	P-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-P-CONT1_8_TiOx	7		-0.0063	0	-0.0005	0	0	0	0.0063
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_1_TiOx	2		-0.0063	0	0	0	0.0063	0.0063	0.0109
MOSTMEG	P#4	Portugal	CIZ	MP	BG_PT	MT	MTI	MOSTMEG_lvo-P4_4_TiOx	1		-0.0046	0	-0.0001	-0.0002	0	0	0.0046
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	1		-0.0075	0	-0.0003	-0.0001	-0.0002	0	0.0075
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	2		-0.0059	0	0	-0.0001	0	0	0.0059

Reference	Sample	Country	Location1	Type	id	id2	id3	Group	Point	Group	M_Fe3+	M_Ti4+	M_Mn4+	M_Sn4+	M_Sb5+	M_V5+	Total
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	3		-0.0046	0	-0.0001	0	0	0	0.0046
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	4		-0.0068	0	0	-0.0002	0	0	0.0068
MOSTMEG	P#5	Portugal	CIZ	MP	BG_PT	MT	MTu	MOSTMEG_lvo-P5_3_TiOx	5		-0.0058	0	-0.0001	-0.0002	-0.0001	0	0.0058
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_2_oxidoTi	1		-0.004	0	-0.0001	0	-0.0001	0	0.004
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_3_oxidoTi	1		-0.0063	0	0	0	0	0	0.0063
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	1		-0.0047	0	0	0	-0.0001	0	0.0047
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	2		-0.0031	0	-0.0001	-0.0001	0	0	0.0031
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_4_oxidoTi	3		-0.004	0	-0.0002	0	0	0	0.004
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_5_oxidoTi	1		-0.004	0	0	-0.0003	0	0	0.004
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_6_oxidoTi	1		-0.0056	0	-0.0001	0	-0.0001	0	0.0056
MOSTMEG	R#1	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#1_7_oxidoTi	1		-0.0081	0	0	-0.0008	0	0	0.0082
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	1		-0.0037	0	0	0	0	0	0.0037
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_1_oxidoTi	2		-0.0093	0	-0.0001	-0.0002	0	0	0.0093
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_2_oxidoTi	1		-0.0069	0	-0.0001	0	0	0	0.0069
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	1		-0.0039	0	-0.0002	0	0	0	0.0039
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	2		-0.0045	0	-0.0004	0	-0.0001	0	0.0045
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_3_oxidoTi	3		-0.0051	0	0	-0.0002	-0.0001	0	0.0051
MOSTMEG	R#5	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R#5_5_oxidoTi	1		-0.0034	0	-0.0001	-0.0001	-0.0001	0	0.0034
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_3_TiOx	1		-0.0066	0	0	-0.0001	-0.0001	0	0.0066
MOSTMEG	R#13	Portugal	CIZ	MP	BG_PT	R	Ru	MOSTMEG_lvo-R13_5_TiOx	1		-0.0038	0	-0.0001	0	0	0	0.0038
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_11_TiOx	3		-0.0131	0	0	-0.0003	0.0131	0.0131	0.0226
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	5		0	0	0	0	-0.0002	0	0.0002
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_3_TiOx	6		-0.0014	0	0	0	0	0	0.0014
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	1		-0.0005	0	0	-0.0003	0	0	0.0006
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	2		-0.0012	0	0	-0.0002	-0.0001	0	0.0012
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	3		-0.0005	0	-0.0001	0	0	0	0.0005
MOSTMEG	ZEB-CONT#1	Portugal	CIZ	XM	BG_PT	MT	MTu	MOSTMEG_lvo-ZCONT1_9_TiOx	4		-0.0082	0	-0.0003	0	0	0	0.0082