

**Table of Mineral Compositions from the Oliverian Magma Series and its Cover**

*Garnet*

Sample:	89-12A	89-12E	89-12F	89-12I	89-12J	89-12K	89-23B(c)	89-23B(r)	89-29C(c)
X <sub>PPM</sub> :	0.063	0.122	0.133	0.015	0.018	0.013	0.053	0.037	0.031
X <sub>Alm</sub> :	0.807	0.613	0.618	0.539	0.504	0.541	0.445	0.461	0.388
X <sub>Sps</sub> :	0.092	0.232	0.217	0.173	0.174	0.181	0.185	0.212	0.243
X <sub>Grs</sub> :	0.038	0.032	0.032	0.274	0.304	0.265	0.317	0.290	0.337

Sample:	89-29C(r)	89-24B(c)	89-24B(r)	89-3B(c)	89-3B(r)	89-3C(c)	89-3C(r)		
X <sub>PPM</sub> :	0.021	0.036	0.022	0.074	0.036	0.098	0.033		
X <sub>Alm</sub> :	0.383	0.423	0.408	0.443	0.467	0.461	0.452		
X <sub>Sps</sub> :	0.309	0.212	0.256	0.290	0.301	0.255	0.183		
X <sub>Grs</sub> :	0.288	0.329	0.314	0.193	0.194	0.187	0.183		

Note: Samples from the Oliverian magmas are 89-12I, 89-12J, 89-12K, 89-23B, 89-29C, 89-24B, 89-3B, and 89-3C. Cover samples are 89-12A, 89-12E, and 89-12F. Additional data for cover are described in Spear et al. (1995).

*Plagioclase*

Sample:	89-12A	89-12E	89-12F	89-12I	89-12J	89-12K	89-23B(c)	89-23B(r)	89-23C(c)
X <sub>An</sub> :	0.222	0.217	0.213	0.262	0.240	0.259	0.365	0.214	0.307
X <sub>Alb</sub> :	0.776	0.766	0.781	0.732	0.753	0.731	0.629	0.779	0.680
X <sub>Or</sub> :	0.002	0.016	0.006	0.005	0.007	0.010	0.006	0.007	0.013

Sample:	89-23C(r)	89-3B(c)	89-3B(r)	89-3C(c)	89-3C(r)	89-24b(c)	89-24b(r)		
X <sub>An</sub> :	0.244	0.380	0.199	0.348	0.206	0.300	0.240		
X <sub>Alb</sub> :	0.749	0.612	0.797	0.651	0.792	0.688	0.756		
X <sub>Or</sub> :	0.007	0.008	0.004	0.001	0.002	0.011	0.004		

*Mica and Amphibole*

Sample:	89-12A Bt	89-12A Ms	89-12E Bt	89-12E Ms	89-12F Bt	89-12F Ms	89-12I Bt	89-12I Ms	
Si:	2.669	3.109	2.712	3.083	2.711	3.105	2.733	3.173	
Al:	1.671	2.734	1.685	2.753	1.715	2.713	1.572	2.470	
Ti	0.244	0.019	0.110	0.020	0.117	0.032	0.153	0.030	
Mg:	0.647	0.068	1.186	0.080	1.223	0.092	0.507	0.085	
Fe:	1.561	0.076	1.130	0.073	1.067	0.077	1.831	0.297	
Mn:	0.000	0.002	0.020	0.005	0.007	0.001	0.028	0.002	
Ca:	0.000	0.000	0.010	0.000	0.008	0.003	0.001	0.001	
Na:	0.018	0.139	0.015	0.057	0.029	0.081	0.005	0.031	
K:	0.901	0.858	0.949	0.956	0.895	0.872	1.000	0.978	

Sample:	89-12J Bt	89-12J Ms	89-12K Bt	89-12K Ms	89-23B Amph	89-23B Amph	89-23B Bt Incl	89-23B Bt Matr	
Si:	2.777	3.148	2.703	3.178	6.269	6.192	2.771	2.771	
Al:	1.528	2.504	1.561	2.408	2.418	2.694	1.535	1.522	
Ti	0.118	0.014	0.221	0.070	0.060	0.046	0.099	0.091	
Mg:	0.648	0.097	0.373	0.007	1.242	1.220	0.853	0.903	
Fe:	1.750	0.331	1.933	0.323	3.156	2.949	0.607	1.583	
Mn:	0.033	0.002	0.032	0.003	0.104	0.085	0.028	0.024	
Ca:	0.011	0.000	0.005	0.001	1.868	1.878	0.002	0.002	
Na:	0.007	0.027	0.002	0.024	0.374	0.359	0.005	0.005	
K:	0.947	0.949	0.936	0.954	0.312	0.342	0.930	0.957	

Sample:	89-29C Amph	89-29C Bt	89-24B Bt	89-24B Ms	89-3B Amph	89-3B Bt	89-3C Amph	89-3C Bt	
Si:	6.157	2.744	2.771	3.207	6.230	2.819	6.445	2.769	
Al:	2.466	1.521	1.543	2.449	2.496	1.472	2.380	1.532	
Ti	0.073	0.125	0.145	0.000	0.068	0.093	0.071	0.089	
Mg:	1.194	0.822	0.697	0.118	1.693	1.106	1.893	1.177	
Fe:	3.218	1.648	1.641	0.314	2.677	1.291	2.319	1.256	
Mn:	0.123	0.036	0.039	0.002	0.082	0.091	0.085	0.021	
Ca:	1.932	0.004	0.002	0.000	1.852	0.047	1.786	0.003	
Na:	0.412	0.004	0.005	0.024	0.487	0.007	0.490	0.020	
K:	0.335	0.931	0.943	0.933	0.215	0.858	0.127	1.026	