

TABLE 6. Forsterite analyses.

OXIDES	81-LL-14	81-LL-38*	83-LL-74*	83-LL-142*	83-LL-143*	83-LL-192*	83-LL-236*	83-LL-514*	90-DM-27	91-DM-19	91-KL-2	92-LG-5	92-LG-8
SiO ₂	42.23	40.07	41.57	42.54	42.61	41.85	42.28	42.55	42.46	41.22	41.38	42.22	42.05
TiO ₂	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Al ₂ O ₃	<0.05	na	na	na	na	na	na	na	<0.05	0.08	0.18	<0.05	<0.05
MgO	53.01	55.68	55.20	55.08	56.28	56.24	56.84	56.20	55.71	54.81	54.68	55.50	55.29
CaO	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	<0.05	<0.05	0.10	0.07	<0.05	<0.05
MnO	<0.05	0.08	0.27	0.07	<0.05	0.06	<0.05	<0.05	0.12	0.15	0.12	0.08	0.08
FeO	5.25	3.57	4.21	2.93	1.62	1.03	1.15	2.01	1.95	1.65	2.01	1.82	1.76
Na ₂ O	<0.05	na	na	na	na	na	na	na	<0.05	<0.05	<0.05	<0.05	<0.05
total	100.49	99.40	101.25	100.62	100.56	99.24	100.27	100.76	100.24	98.01	98.44	99.62	99.18
Formulae normalized to 3 cations													
Si	1.008	0.953	0.977	1.004	0.999	0.991	0.991	0.997	1.001	0.993	0.994	1.001	1.001
Ti	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Al	<0.001	na	na	na	na	na	na	na	<0.001	0.002	0.005	<0.001	<0.001
Mg	1.885	1.974	1.934	1.936	1.967	1.985	1.986	1.963	1.957	1.966	1.956	1.960	1.961
Ca	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	0.003	0.002	<0.001	<0.001
Mn	<0.001	0.002	0.005	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	0.003	0.002	0.002	0.002
Fe	0.105	0.071	0.083	0.058	0.032	0.020	0.023	0.039	0.039	0.033	0.040	0.036	0.035
Na	<0.001	na	na	na	na	na	na	na	<0.001	<0.001	<0.001	<0.001	<0.001
X _{Mg} **	0.947	0.965	0.959	0.971	0.984	0.990	0.989	0.981	0.980	0.984	0.980	0.982	0.982

*na = not analyzed
**X_{Mg} = Mg/(Mg+Fe)
*Data from Park (1986)