

# Appendix I

## Y-98A EPMA Data

Experiment	Phase	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Cr <sub>2</sub> O <sub>3</sub>	V <sub>2</sub> O <sub>3</sub>	MgO	FeO	MnO	CaO	Na <sub>2</sub> O	ΣREE**	Total	Fo #
Y-98A 10	Glass	46.25	5.59	0.62	0.26	0.11	13.66	18.84	0.49	7.17	0.23	6.80	100.00	80
	Olivine	39.64	0.03	0.01	0.15	BDL*	42.50	18.35	0.43	0.20	0.00	NA	101.31	
Y-98A 2	Glass	46.25	5.81	0.63	0.43	0.12	12.57	19.95	0.48	7.44	0.12	6.20	100.00	77
	Olivine	39.06	0.03	0.01	0.30	BDL*	40.06	21.22	0.44	0.22	0.00	NA	101.35	
Y-98A 17	Glass	46.31	5.85	0.62	0.63	0.12	13.86	17.99	0.47	7.36	0.01	6.77	100.00	80
	Olivine	38.93	0.03	0.01	0.43	BDL*	41.86	18.51	0.41	0.21	0.01	NA	100.40	
Y-98A 14	Glass	46.11	5.75	0.62	0.63	0.12	13.03	19.55	0.48	7.23	0.01	6.47	100.00	79
	Olivine	39.44	0.03	0.01	0.43	BDL*	40.69	20.66	0.43	0.22	0.00	NA	101.92	

BDL = below detection limit

ΣREE\*\* = total REE content of the glass was determined by difference from 100%

Fo # = mol % forsterite component of the olivine

# Appendix I

## Y-98B EPMA Data

Experiment	Phase	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	Cr <sub>2</sub> O <sub>3</sub>	V <sub>2</sub> O <sub>3</sub>	MgO	FeO	MnO	CaO	Na <sub>2</sub> O	Total	Fo #
Y-98B 790	Glass	49.06	5.51	0.57	0.47	0.13	16.72	19.27	0.50	7.31	0.16	99.71	82
	Olivine	39.05	0.07	0.01	0.30	BDL	43.73	16.47	0.34	0.19	0.00	100.36	
Y-98B 796	Glass	52.43	5.91	0.61	0.79	0.18	17.39	13.82	0.48	7.81	0.00	99.42	86
	Olivine	39.57	0.03	0.01	0.50	BDL	46.71	13.12	0.36	0.18	0.00	100.56	
Y-98B 791	Glass	49.81	5.75	0.60	0.33	0.18	15.13	19.30	0.51	7.67	0.18	99.47	81
	Olivine	38.88	0.05	0.01	0.20	BDL	42.96	17.72	0.39	0.19	0.00	100.40	
Y-98B 797	Glass	53.97	6.57	0.68	0.82	0.21	14.81	13.81	0.50	8.59	0.00	99.95	84
	Olivine	39.38	0.04	0.01	0.58	BDL	45.18	14.88	0.40	0.19	0.00	100.77	

BDL = below detection limit

Fo # = mol % forsterite component of the olivine