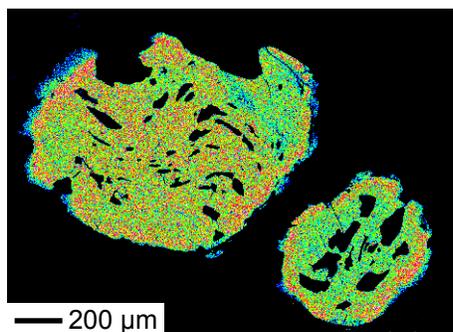
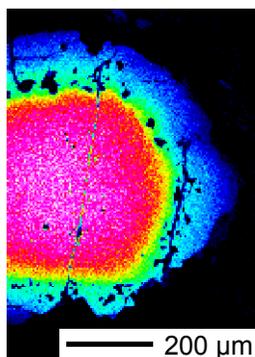


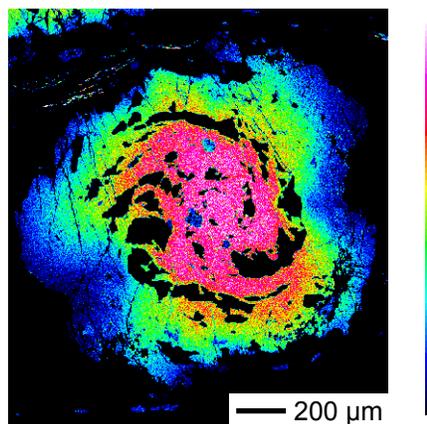
Mn ZONING MAPS FOR GARNET FROM THERMOBAROMETRY ANALYSES



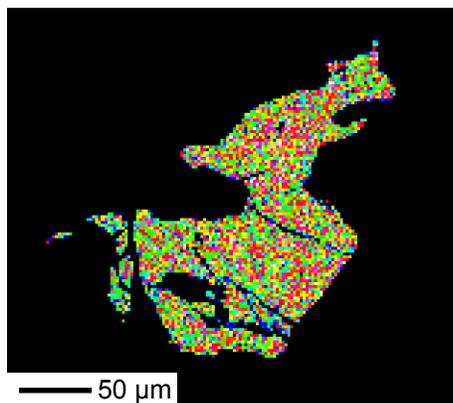
AW 9-3-03 12



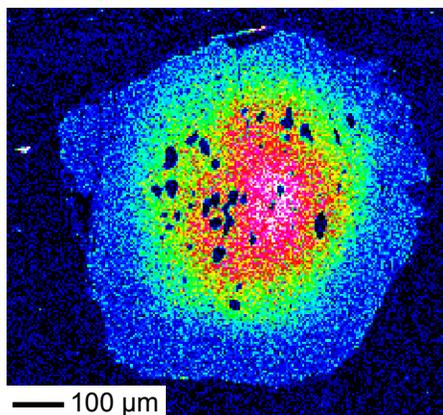
AW 9-11-03 6



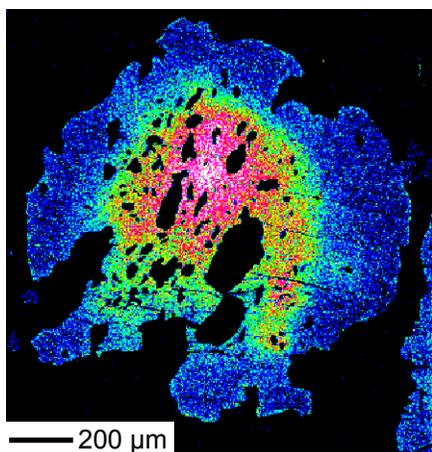
AW 9-13-03 3



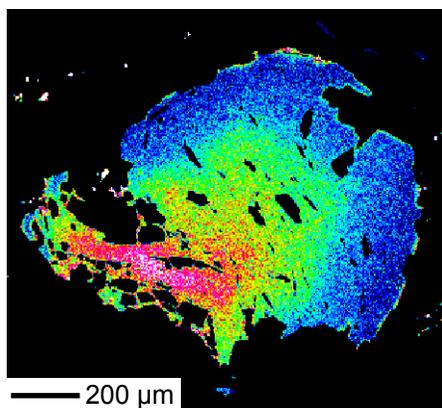
AW 9-29-03 12



AW 9-21-04 2B (i)



AW 9-21-04 2B (ii)



AW 9-5-05 2A

Supplemental File 4. B. Electron Microprobe Analyses for Thermobarometry Results**AW 9-3-03 12**

Phase	TiO ₂	SiO ₂	Na ₂ O	FeO*	K ₂ O	Cr ₂ O ₃	Al ₂ O ₃	MgO	MnO	CaO	Total
garnet	0.036	37.706	0.001	34.269	0.008	0**	22.170	2.133	0.780	4.986	102.089
biotite	1.580	36.880	0.187	18.942	8.701	0.022	19.441	9.916	0.019	0.058	95.745
plagioclase	0.017	62.196	8.620	0.074	0.059	0	23.134	0.004	0.010	5.377	99.492
muscovite	0.664	46.155	1.171	1.171	9.801	0.007	36.037	0.650	0.011	0.016	95.684

AW 9-11-03 6

Phase	TiO ₂	SiO ₂	Na ₂ O	FeO	K ₂ O	Cr ₂ O ₃	Al ₂ O ₃	MgO	MnO	CaO	Total
garnet	0.026	36.878	0.025	37.027	0.002	0.024	21.721	1.568	1.458	2.496	101.224
biotite	1.767	34.271	0.145	21.431	4.926	0.020	19.330	6.931	0.042	0.435	89.298
plagioclase	0.270	46.463	1.492	1.348	9.026	0.012	36.301	0.672	0.005	0.013	95.603
muscovite	0.018	66.213	10.430	0.013	0.057	0.000	21.118	0.006	0.002	2.432	100.287

AW 9-13-03 3

Phase	TiO ₂	SiO ₂	Na ₂ O	FeO	K ₂ O	Cr ₂ O ₃	Al ₂ O ₃	MgO	MnO	CaO	Total
garnet	0.011	36.331	0.031	38.368	0.012	0.014	20.815	1.796	1.006	1.976	100.359
biotite	1.701	35.086	0.107	22.269	8.313	0.022	18.634	7.160	0.049	0.104	93.443
plagioclase	0.013	66.328	11.303	0.053	0.061	0.020	20.526	0.004	0.006	0.961	99.274
muscovite	0.236	45.794	1.515	1.697	9.186	0.013	35.464	0.690	0.011	0.005	94.611

AW 9-29-03 12

Phase	TiO ₂	SiO ₂	Na ₂ O	FeO	K ₂ O	Cr ₂ O ₃	Al ₂ O ₃	MgO	MnO	CaO	Total
garnet	2.004	35.428	0.071	22.283	9.443	0.017	17.473	8.512	0.149	0.017	95.398
biotite	0.307	45.945	0.877	2.779	10.223	0.007	32.836	1.152	0.020	0.010	94.158
plagioclase	0.009	68.092	11.580	0.195	0.056	0.000	19.114	0.001	0.006	0.266	99.319
muscovite	0.106	36.457	0.035	27.318	0.004	0.012	21.350	0.977	9.401	4.806	100.467

AW 9-21-04 2B (i)

Phase	TiO ₂	SiO ₂	Na ₂ O	FeO	K ₂ O	Cr ₂ O ₃	Al ₂ O ₃	MgO	MnO	CaO	Total
garnet	0.004	37.763	0.023	35.621	0.011	0.012	22.309	4.039	0.269	1.910	101.961
biotite	1.966	36.810	0.263	17.927	8.680	0.027	19.634	11.119	0.023	0.061	96.510
plagioclase	0.622	46.421	1.663	1.141	8.927	0.029	35.987	0.818	0.008	0.011	95.627
muscovite	0.023	65.150	10.018	0.067	0.059	0.006	21.721	0.002	0.013	3.171	100.229

AW 9-21-04 2B (ii)

Phase	TiO ₂	SiO ₂	Na ₂ O	FeO	K ₂ O	Cr ₂ O ₃	Al ₂ O ₃	MgO	MnO	CaO	Total
garnet	0.027	37.821	0.017	35.181	0.001	0.011	22.278	4.064	0.528	2.076	102.004
biotite	1.839	37.023	0.242	17.390	8.570	0.024	19.378	11.267	0.015	0.088	95.835
plagioclase	0.569	46.251	1.709	1.188	8.899	0.021	36.386	0.719	0.008	0.013	95.762
muscovite	0.023	65.255	10.082	0.055	0.074	0.022	21.743	0.000	0.006	3.041	100.303

AW 9-5-05 2A

Phase	TiO ₂	SiO ₂	Na ₂ O	FeO	K ₂ O	Cr ₂ O ₃	Al ₂ O ₃	MgO	MnO	CaO	Total
garnet	0.064	37.216	0.035	30.459	0.005	0.011	21.867	1.919	2.310	7.074	100.960
biotite	1.672	36.293	0.087	19.308	9.400	0.038	18.425	10.200	0.126	0.081	95.629
plagioclase	0.468	46.513	0.757	1.625	10.436	0.010	33.992	1.215	0.019	0.024	95.059
muscovite	0.012	63.161	9.231	0.036	0.091	0.013	22.346	0.003	0.011	4.339	99.242

*All iron as FeO. **0 is not detected.