Table 1 Representative microprobe analyses of garnet. Cations based on 12 oxygens. Ferric iron was estimated using the method of Droop (1987).

Sample	Cpx-bearing							Cpx-free									
	P04-47			P05-01				P04-48				P10-9					
Point	76	73	70	5	14	22	23	10	53	22	25	9	20	16	5	22	10
Description	core	core	rim	rim	rim	core	core	rim	rim	core	core	rim	rim	core	rim	rim	rim
SiO_2	38.23	38.46	37.76	38.23	38.03	38.40	38.60	37.85	37.86	37.63	37.40	37.79	37.56	37.32	37.50	37.66	37.45
TiO_2	0.10	0.12	0.09	0.11	0.12	0.03	0.08	0.05	0.08	0.05	0.06	0.02	0.08	0.03	0.12	0.12	0.03
Al_2O_3	21.34	21.43	21.19	20.97	21.18	21.12	21.23	21.95	21.94	21.44	21.11	21.11	20.80	20.90	20.60	21.19	20.55
Cr_2O_3	0.01	0.00	0.01	0.00	0.00	0.03	0.03	0.07	0.00	0.00	0.03	0.00	0.04	0.00	0.00	0.00	0.00
FeO	27.49	27.71	28.64	27.02	27.56	27.52	25.87	28.29	27.92	28.92	28.83	28.74	30.52	28.67	30.56	29.98	32.18
MnO	0.61	0.55	0.76	1.36	2.32	0.63	0.54	0.98	0.98	1.06	0.86	1.25	1.48	0.64	0.71	0.45	0.90
MgO	4.45	4.47	3.84	3.29	2.74	4.69	4.43	3.78	3.34	4.40	4.69	3.76	3.23	3.48	2.51	3.04	2.73
CaO	8.33	8.55	8.26	10.15	8.91	7.84	9.76	8.58	8.08	7.47	6.99	7.30	7.35	7.87	7.75	8.26	5.88
Na_2O	0.06	0.03	0.01	0.00	0.00	0.01	0.01	0.01	0.04	0.02	0.04	0.01	0.01	0.00	0.00	0.00	0.00
K_2O	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.03	0.18	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Total	100.61	101.32	100.58	101.13	100.86	100.27	100.55	101.59	100.41	100.97	100.0	100.00	101.08	98.91	99.75	100.7	99.72
Formula																	
Si	2.99	2.98	2.97	2.99	2.99	3.00	3.00	2.95	2.98	2.95	2.95	2.99	2.97	2.99	3.00	2.97	3.00
Al iv	0.01	0.02	0.03	0.01	0.01	0.00	0.00	0.05	0.03	0.05	0.05	0.01	0.04	0.01	0.00	0.03	0.00
Al vi	1.95	1.95	1.94	1.92	1.96	1.95	1.95	1.96	2.01	1.93	1.92	1.96	1.91	1.96	1.94	1.95	1.95
Ti	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00
Cr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fe^{3+}	0.04	0.04	0.05	0.06	0.03	0.04	0.04	0.03	0.00	0.06	0.06	0.03	0.08	0.03	0.04	0.04	0.04
Fe^{2+}	1.76	1.76	1.83	1.70	1.78	1.76	1.65	1.82	1.86	1.83	1.84	1.87	1.94	1.88	2.00	1.94	2.12
Mn	0.04	0.04	0.05	0.09	0.16	0.04	0.04	0.06	0.07	0.07	0.06	0.08	0.10	0.04	0.05	0.03	0.06
Mg	0.52	0.52	0.45	0.38	0.32	0.55	0.51	0.44	0.39	0.51	0.55	0.44	0.38	0.42	0.30	0.36	0.33
Ca	0.70	0.71	0.70	0.85	0.75	0.66	0.81	0.72	0.68	0.63	0.59	0.62	0.62	0.68	0.66	0.70	0.51
Total	8.01	8.01	8.02	8.02	8.01	8.00	8.00	8.03	8.01	8.04	8.03	8.01	8.03	8.01	8.01	8.02	8.00
$Mg/(Mg+Fe^{2+})$	0.23	0.23	0.20	0.18	0.15	0.24	0.24	0.19	0.17	0.22	0.23	0.19	0.16	0.18	0.13	0.16	0.13
Almandine	58.00	58.00	60.00	56.00	59.00	58.00	54.00	59.00	62.00	59.00	59.00	65.00	63.00	62.00	66.00	63.00	70.01
Andradite	2.00	2.00	3.00	3.00	2.00	2.00	2.00	1.00	0.00	3.00	3.00	2.00	4.00	2.00	2.00	2.00	2.12
Grossular	22.00	22.00	21.00	25.00	24.00	20.00	25.00	23.00	23.00	18.00	17.00	18.00	17.00	21.00	20.00	21.00	14.86
Pyrope	17.00	17.00	15.00	13.00	11.00	18.00	17.00	15.00	13.00	17.00	19.00	12.00	13.00	14.00	10.00	12.00	10.96
Spessartine	1.00	1.00	2.00	3.00	5.00	1.00	1.00	2.00	2.00	2.00	2.00	4.00	3.00	1.00	2.00	1.00	2.05

Table 2 Representative microprobe analyses of clinopyroxene. Cations based on 6 oxygens. Ferric iron was estimated using the method of Droop (1987). Endmembers follow Morimoto (1988).

Sample	P04-47	P04-47	P05-01	P05-01	P05-01	P05-01
point	43	2	25	47	34	25
Description	core	rim	core	core	rim	rim
SiO_2	50.17	51.07	52.03	51.78	51.75	52.85
TiO_2	0.49	0.17	0.22	0.40	0.12	0.05
Al_2O_3	5.61	3.21	5.35	4.44	3.00	3.36
Cr_2O_3	0.04	0.00	0.02	0.00	0.00	0.00
FeO	13.74	11.10	10.18	11.52	9.56	9.67
MnO	0.16	0.13	0.11	0.00	0.12	0.11
MgO	8.46	11.03	9.70	9.93	11.44	11.59
CaO	19.27	21.15	19.23	20.60	22.64	21.40
Na_2O	2.63	1.73	2.56	1.78	1.10	1.39
K_2O	0.02	0.00	0.00	0.00	0.00	0.00
Total	100.59	99.59	99.39	100.45	99.72	100.42
Formula						
Si	1.872	1.912	1.942	1.931	1.936	1.959
Ti	0.014	0.005	0.006	0.011	0.003	0.001
Al	0.247	0.142	0.235	0.195	0.132	0.147
Cr	0.001	0.000	0.001	0.000	0.000	0.000
Fe^{3+}	0.172	0.150	0.053	0.049	0.069	0.032
Fe^{2+}	0.257	0.198	0.265	0.310	0.230	0.268
Mn	0.005	0.004	0.003	0.000	0.004	0.003
Mg	0.471	0.616	0.540	0.552	0.638	0.640
Ca	0.770	0.848	0.769	0.823	0.907	0.850
Na	0.190	0.125	0.186	0.129	0.080	0.100
K	0.001	0.000	0.000	0.000	0.000	0.000
Total	4	4	4	4	4	4
$Mg/(Mg+Fe^{2+})$	0.647	0.757	0.671	0.640	0.735	0.705
Endmembers						
Enstatite	0.314	0.370	0.343	0.328	0.359	0.364
Ferrosillite	0.172	0.119	0.168	0.184	0.130	0.152
Wollastonite	0.514	0.510	0.489	0.488	0.511	0.483
Name	diopside	diopside	diopside	diopside	diopside	diopside

Table 3 Representative microprobe analyses of amphibole. Formulas calculated on a 23 oxygen basis after Tindle and Webb (1994).

Sample	P0-47b	P0-47b	P05-01	P05-01	P05-01
Point	6	20	16	32	43
SiO_2	40.563	40.567	41.702	42.641	42.933
TiO_2	0.936	0.752	1.378	1.226	1.090
Al_2O_3	12.665	12.990	11.704	11.651	11.159
Cr_2O_3	0.037	0.016	0.106	0.000	0.009
FeO	20.247	19.634	19.061	16.928	18.039
MnO	0.204	0.300	0.112	0.100	0.036
MgO	8.196	8.285	8.765	10.323	9.657
CaO	11.233	11.924	11.552	11.896	11.619
Na_2O	1.410	1.326	1.461	1.407	1.259
K_2O	1.667	1.647	1.715	1.684	1.447
Total	97.158	97.441	97.555	97.856	97.247
Formula					
Si	6.166	6.170	6.331	6.377	6.459
Al iv	1.834	1.830	1.669	1.623	1.541
Al vi	0.435	0.499	0.425	0.431	0.437
Ti	0.107	0.086	0.157	0.138	0.123
Cr	0.000	0.000	0.000	0.000	0.000
Fe^{3+}	0.786	0.561	0.410	0.375	0.468
Fe^{2+}	1.788	1.936	2.010	1.742	1.802
Mn	0.026	0.039	0.014	0.013	0.005
Mg	1.857	1.879	1.984	2.301	2.166
Ca	1.830	1.943	1.879	1.906	1.873
Na	0.416	0.391	0.430	0.408	0.367
K	0.323	0.320	0.332	0.321	0.278
OH*	2.000	2.000	2.000	2.000	2.000
Total	17.568	17.654	17.641	17.635	17.517
Amphibole group	Ca	Ca	Ca	Ca	Ca
(Ca+Na) (B)	2	2	2	2	2
Na (B)	0.170	0.057	0.121	0.094	0.127
(Na+K) (A)	0.568	0.654	0.641	0.635	0.517
$Mg/(Mg+Fe^2)$	0.510	0.492	0.497	0.569	0.546
$Fe^3/(Fe^3+Alvi)$	0.644	0.529	0.491	0.465	0.517
Sum of S2	13	13	13	13	13
Amphibole names	potassian-magnesian hastingsite	potassian-magnesian hastingsite	potassian-ferroan pargasitic hornblende	potassian-ferroan pargasitic hornblende	potassian-magnesian hastingsitic hornblende

Table 4 Representative microprobe analyses of biotite. Cations based on 22 oxygens.

Sample	Cpx-bearing									Cpx-free					
	P04-47			P05-01						P04-48			P10-9		
Description	matrix	on grt	on grt	in Grt	matrix	on Cpx	on Cpx	on Grt	on Grt	in Grt	matrix	on Grt	on Grt	on Grt	on Grt
Point	35	9	19	28	47	64	84	6	54	56	43	15	68	19	25
SiO_2	36.526	36.278	35.414	36.496	36.271	36.795	37.037	35.589	36.016	37.568	35.690	35.095	36.254	34.851	34.730
TiO_2	4.757	2.894	3.190	3.449	4.199	3.322	3.960	4.395	2.608	5.218	4.252	4.562	4.919	4.038	3.380
Al_2O_3	13.687	15.667	14.662	14.325	13.871	14.416	14.489	14.773	15.294	14.422	14.437	14.499	14.823	14.964	14.990
Cr_2O_3	0.015	0.019	0.045	0.007	0.000	0.000	0.000	0.074	0.000	0.000	0.029	0.056	0.020	0.000	
FeO	20.808	20.218	21.088	18.880	19.522	17.992	17.272	20.520	21.891	18.054	22.269	22.718	20.346	23.040	24.560
MnO	0.035	0.127	0.099	0.008	0.003	0.027	0.000	0.064	0.201	0.015	0.077	0.052	0.099	0.000	0.000
MgO	10.731	11.034	10.772	11.781	11.215	12.858	13.128	10.339	11.199	11.545	9.751	9.592	9.933	8.669	7.790
CaO	0.014	0.055	0.015	0.000	0.035	0.085	0.087	0.039	0.047	0.000	0.041	0.000	0.032	0.029	0.090
Na_2O	0.084	0.069	0.032	0.059	0.063	0.055	0.093	0.099	0.000	0.139	0.024	0.023	0.100	0.331	0.000
K_2O	9.934	10.073	9.333	9.927	9.635	9.952	10.006	9.877	9.000	9.614	9.786	9.531	9.587	9.360	9.150
Total	96.591	96.434	94.650	94.931	94.813	95.502	96.072	95.769	96.255	96.575	96.356	96.128	96.113	95.281	94.690
Formula															
Si	5.498	5.453	5.463	5.533	5.526	5.513	5.491	5.422	5.477	5.527	5.443	5.390	5.463	5.413	5.459
Al iv	2.428	2.547	2.537	2.467	2.474	2.487	2.509	2.578	2.523	2.473	2.557	2.610	2.537	2.587	2.541
Al vi	0.000	0.228	0.129	0.093	0.017	0.059	0.023	0.076	0.028	0.028	0.038	0.015	0.095	0.152	0.236
Ti	0.539	0.327	0.370	0.393	0.481	0.374	0.442	0.504	0.463	0.577	0.488	0.527	0.557	0.472	0.400
Cr	0.002	0.002	0.005	0.001	0.000	0.000	0.000	0.009	0.012	0.000	0.003	0.007	0.002	0.000	0.000
Fe	2.619	2.541	2.721	2.394	2.487	2.255	2.142	2.615	2.638	2.221	2.840	2.918	2.564	2.993	3.228
Mn	0.004	0.016	0.013	0.001	0.000	0.003	0.000	0.008	0.010	0.002	0.010	0.007	0.013	0.000	0.000
Mg	2.408	2.472	2.477	2.662	2.547	2.872	2.901	2.348	2.464	2.532	2.217	2.196	2.231	2.007	1.825
Ca	0.002	0.009	0.002	0.000	0.006	0.014	0.014	0.006	0.007	0.000	0.007	0.000	0.005	0.005	0.015
Na	0.025	0.020	0.010	0.017	0.019	0.016	0.027	0.029	0.018	0.040	0.007	0.007	0.029	0.100	0.000
K	1.907	1.931	1.836	1.920	1.873	1.902	1.892	1.919	1.859	1.804	1.904	1.867	1.843	1.854	1.834
OH*	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
TOTAL	19.996	20.067	19.944	20.043	19.956	20.102	20.082	19.920	19.936	19.931	19.937	19.865	19.857	19.863	19.802
Mg/(Mg+Fe)	0.48	0.49	0.48	0.53	0.51	0.56	0.58	0.47	0.48	0.53	0.44	0.43	0.47	0.40	0.36

Table 5 Representative microprobe analyses of feldspars. Abbreviations used: ic – inclusion in clinopyroxene; ig – inclusion in garnet; L – large grain; m – microgranular; e – exsolution.

Sample	Cpx-bearing																
	P04-47						P05-01										
Mineral	Plagioclase						Plagioclase						K-feldspar				
Point	29ic	24ig	18L	10m	16m	26m	31ic	3ic	79L	19m	74m	71e	89e	68L	90L	72m	73m
SiO_2	65.04	64.59	64.82	63.69	62.86	64.99	63.89	65.35	64.13	64.87	64.06	63.1	64.85	64.66	64.01	64.19	64.08
TiO_2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.02	0.00	0.08
Al_2O_3	22.11	22.15	22.03	23.07	22.87	22.14	22.41	21.51	22.22	21.48	22.85	23.19	22.42	18.66	18.6	18.61	18.59
FeO	0.17	0.20	0.12	0.44	0.40	0.13	0.16	0.22	0.25	0.31	0.01	0.07	0.02	0.07	0.03	0.00	0.08
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.00
MgO	0.00	0.00	0.01	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00
CaO	3.43	3.3	3.29	4.48	4.27	3.38	3.73	3.16	3.26	3.25	3.68	4.21	3.05	0.00	0.10	0.02	0.03
Na_2O	9.59	9.74	10.10	9.09	9.39	9.73	9.25	9.22	9.30	9.40	9.62	9.35	9.80	1.73	1.48	1.57	1.15
K_2O	0.59	0.58	0.24	0.19	0.21	0.39	0.57	0.43	0.41	0.36	0.17	0.21	0.19	14.76	15.42	15.26	15.13
BaO	0.04	0.02	0.01	0.09	0.00	0.04	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total	100.96	100.57	100.61	101.09	100.00	100.8	100.01	99.9	99.61	99.67	100.39	100.14	100.33	99.96	99.66	99.7	99.14
An	15.94	15.25	15.05	21.16	19.85	15.74	17.61	15.54	15.83	15.71	17.28	19.69	14.53	0	0.46	0.09	0.15
Ab	80.71	81.52	83.64	77.59	79.00	82.01	79.16	81.93	81.79	82.24	81.78	79.13	84.38	15.13	12.68	13.53	10.32
Or	3.28	3.2	1.3	1.09	1.15	2.18	3.23	2.53	2.38	2.05	0.94	1.18	1.09	84.87	86.86	86.38	89.53
Cn	0.06	0.03	0.01	0.16	0.00	0.07	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd

Table 5 continued.

	Cpx-free																		
Sample	P04-48									P10-9									
Mineral	Plagioclase					K-feldspar				Plagioclase							K-feldspar		
Point	33ig	60L	65L	17m	21m	47L	50L	51e	24m	64m	15ig	3L	7L	23m	31m	27e	26L	29L	30m
SiO_2	66.23	64.43	66.57	64.18	64.31	65.25	65.74	65.37	64.72	63.84	65.54	64.4	65.15	63.36	65.02	65.52	64.45	63.8	63.85
TiO_2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.06	0.00	0.12	0.03	0.00
Al_2O_3	21.33	21.67	21.44	22.2	22.57	18.7	18.76	18.67	18.47	18.26	21.49	22.81	21.99	22.75	21.87	21.17	18.65	18.36	18.22
FeO	0.42	0.35	0.27	0.34	0.33	0.04	0.01	0.04	0.00	0.07	0.17	0.17	0.39	0.58	0.00	0.00	0.00	0.00	0.06
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MgO	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	2.75	3.17	2.47	3.55	3.67	0.05	0.07	0.04	0.06	0.01	2.81	3.20	2.63	3.84	2.56	2.31	0.00	0.00	0.00
Na_2O	10.51	9.91	10.29	9.69	9.65	1.75	1.46	1.26	1.62	0.5	10.43	9.79	10.03	8.94	10.35	10.52	1.30	1.43	0.87
K_2O	0.32	0.35	0.44	0.25	0.17	14.91	15.36	15.41	15.08	16.33	0.12	0.40	0.09	0.12	0.14	0.23	15.11	14.77	15.33
BaO	0.01	0.04	0.08	0.08	0.02	0.23	0.20	0.37	0.35	0.66	0.00	0.24	0.01	0.41	0.00	0.02	0.36	0.32	0.06
Total	101.58	99.95	101.56	100.28	100.71	100.93	101.59	101.17	100.32	99.69	100.65	101.01	100.29	100.0	100	99.77	99.99	98.71	98.39
An	12.40	14.71	11.41	16.58	17.19	0.25	0.33	0.20	0.29	0.05	12.87	14.90	12.59	18.91	11.93	10.68	0.00	0.00	0.00
Ab	85.87	83.28	86.03	81.92	81.84	15.07	12.54	10.96	13.93	4.38	86.47	82.48	86.88	79.65	87.29	88.02	11.49	12.76	7.93
Or	1.71	1.94	2.43	1.37	0.93	84.27	86.79	88.2	85.17	94.39	0.65	2.22	0.51	0.7	0.78	1.27	87.87	86.67	91.96
Cn	0.01	0.06	0.13	0.14	0.03	0.4	0.35	0.64	0.61	1.18	0.00	0.41	0.02	0.74	0.00	0.03	0.64	0.58	0.11

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