

Supplemental Table IV. Augite Trace Element Compositions

	Ti	V	Cr	Sr	Y	Zr	La	Ce	Nd	Sm	Eu	Dy	Er	Yb
ODP-735B-83-7-139 rim to plagioclase	4282	370	3000	7.7	21.7	39.3	.45	3.27	4.80	2.94	.69	4.36	2.57	2.71
ODP-735B-83-7-139 core	1590	230	3764	4.7	6.5	3.5	.23	1.10	1.53	1.09	.41	1.90	1.14	1.24
ODP-735B-83-7-139 rim to olivine							.57	3.29	4.54	2.70	.55	4.53	2.58	2.65
JR31-12-6 grain 1 rim	2593	340	939	10	11.9	7.8	.29	1.48	2.32	1.59	.61	3.07	1.53	1.62
JR31-12-6 grain 1 core	2424	315	1739	12.3	13.9	10.2	.24	1.25	2.21	1.34	.46	2.33	1.35	1.24
JR31-12-6 grain 1 in between	2212	301	1476	10.6	12	8.3								
JR31-12-6 grain 2 rim	3056	338	1776	12.2	19.1	22.1	.44	1.88	2.30	1.53	.64	2.77	1.70	1.62
JR31-12-6 grain 2 core	1686	264	787	6.4	7.5	4.6	.24	1.09	1.58	.96	.45	1.81	1.03	.93
JR31-12-28 rim	2547	198	112	0.9	5.7	4.6	.023	.128	.292	.222	.072	.540	.675	.945
JR31-12-28 core	4187	200	109	1.9	5.4	5.3	.036	.234	.507	.423	.134	1.025	.811	1.150
JR31-12-28 repeat							.030	.171	.387	.274	.072	.635	.632	.844
JR31-12-1 rim	3207	323	1227	7.7	20.7	44	.30	1.65	2.86	1.86	.51	3.41	1.99	1.98
JR31-12-1 core	1876	267	1848	8.3	9.1	7.1	.19	1.06	1.67	1.26	.41	1.90	1.13	1.21
6K-466-R11 rim	2732	369	175	8.9	61.5	107.4	1.90	9.20	12.38	5.82	1.28	9.82	5.71	5.89
6K-466-R11 core	3307	452	253	9.5	76.3	135.1	1.84	10.46	13.56	6.32	1.31	11.29	6.42	6.75
6K-467-R09 rim	4196	429	147	10.1	28.4	25.9	.40	2.52	3.76	1.85	.65	3.37	2.00	2.10
6K-467-R09 core	3027	395	145	9.5	26	28.8	.43	2.79	4.72	2.37	.83	4.57	2.62	2.51
6K-466-R08 rim1	3086	477	98	9.6	58.1	52.9	1.79	9.83	12.59	5.98	1.65	11.03	6.65	6.56
6K-466-R08 core	5009	560	133	12.2	68.1	54.1	1.78	8.48	11.06	5.43	1.66	9.81	5.54	5.99
6K-466-R08 rim2	3820	525	112	10.5	61.9	58	1.43	7.33	9.73	4.85	1.36	8.59	5.42	5.44
6K-466-R08 rim3	3208	428	82	10.5	69.5	65	1.52	7.74	10.99	5.92	1.49	10.92	6.77	6.42
JR31-39-8 rim	4246	398	99	9.9	54.3	94.7	1.62	7.85	9.79	4.88	1.26	8.37	4.64	4.66
JR31-39-8 core	3430	389	80	10.3	52.9	113.9	1.85	8.27	10.40	5.55	1.41	8.40	4.71	5.09
6K-460-R13 rim	3706	396	138	9.4	34.9	52.4	.78	3.96	5.23	2.71	.67	4.46	2.55	2.85
6K-460-R13 core1	2705	303	116	8.2	23.9	31.2	.52	2.27	2.65	1.61	.46	2.31	1.51	1.20
6K-460-R13 core2							.88	4.16	4.73	2.45	.71	4.50	2.69	2.40