

**Table T3.** Microprobe analyses of plagioclase in Leg 176 gabbros. (Continued on next six pages).

Sample:* N:	MS1-1 10	MS3-2 15	MS6-3 11	MS9-4 10	MS11-5 7	MS12-6 5	MS14-7 5	MS18-8 5	MS19-9 5	MS20-10 5	MS22-11 10	MS23-12 5	MS24-13 3	MS25-14 3	MS26-15 6	MS27-16 3	MS28-17 5	MS41-18 10
Major element oxides (wt%):																		
SiO <sub>2</sub>	49.98	50.50	51.40	49.18	55.15	54.98	55.19	58.13	55.94	56.31	58.82	55.63	57.83	57.66	53.35	53.64	55.23	59.19
TiO <sub>2</sub>	0.02	0.03	0.05	0.02	0.05	0.06	0.04	0.04	0.07	0.07	0.05	0.04	0.07	0.08	0.06	0.05	0.05	0.04
Al <sub>2</sub> O <sub>3</sub>	32.82	32.52	31.59	33.40	28.66	28.88	28.89	26.54	28.48	28.36	26.59	28.46	27.33	26.25	29.68	30.29	28.85	25.89
FeOt	0.06	0.19	0.11	0.13	0.17	0.14	0.10	0.13	0.15	0.19	0.38	0.19	0.20	0.19	0.20	0.19	0.18	0.17
MnO	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.01	0.00
MgO	0.09	0.03	0.03	0.04	0.04	0.01	0.01	0.01	0.01	0.02	0.21	0.02	0.01	0.02	0.02	0.03	0.02	0.01
CaO	15.30	14.62	14.02	15.65	11.09	11.07	11.32	8.72	10.03	10.02	8.00	10.88	8.77	8.24	11.86	12.03	10.34	7.91
Na <sub>2</sub> O	2.87	3.23	3.58	2.51	5.18	5.18	5.14	6.51	5.82	5.82	6.93	5.32	6.55	6.73	4.82	4.72	5.63	6.96
K <sub>2</sub> O	0.01	0.03	0.03	0.02	0.04	0.07	0.05	0.09	0.05	0.10	0.18	0.08	0.12	0.14	0.06	0.06	0.10	0.10
P <sub>2</sub> O <sub>5</sub>	0.01	0.02	0.01	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.01	0.03	0.01	0.01	0.01	0.01	0.00	0.02
Total:	101.19	101.20	100.84	100.96	100.40	100.40	100.76	100.20	100.58	100.93	101.20	100.68	100.94	99.37	100.07	101.04	100.43	100.29
Calculated cation proportions:																		
Si	2.2543	2.2752	2.3185	2.2252	2.4767	2.4691	2.4704	2.5963	2.5019	2.5099	2.6029	2.4908	2.5691	2.5989	2.4133	2.4026	2.4777	2.6360
Ti	0.0008	0.0012	0.0018	0.0007	0.0017	0.0019	0.0012	0.0012	0.0023	0.0024	0.0016	0.0015	0.0024	0.0027	0.0020	0.0017	0.0018	0.0015
Al	1.7442	1.7266	1.6791	1.7810	1.5162	1.5282	1.5235	1.3981	1.5010	1.4896	1.3872	1.5012	1.4306	1.3946	1.5819	1.5989	1.5251	1.3587
Fe <sup>3+</sup>	0.0039	0.0012	0.0038	0.0000	0.0055	0.0033	0.0058	0.0046	0.0000	0.0018	0.0110	0.0072	0.0000	0.0038	0.0053	0.0000	0.0000	0.0044
Ca	0.7392	0.7057	0.6771	0.7584	0.5331	0.5323	0.5427	0.4182	0.4802	0.4785	0.3800	0.5215	0.4170	0.3980	0.5746	0.5772	0.4968	0.3772
Fe <sup>2+</sup>	0.0016	0.0066	0.0023	0.0050	0.0016	0.0022	0.0006	0.0008	0.0055	0.0057	0.0055	0.0014	0.0075	0.0036	0.0031	0.0069	0.0068	0.0023
Mg	0.0060	0.0022	0.0019	0.0029	0.0026	0.0008	0.0006	0.0006	0.0008	0.0013	0.0136	0.0014	0.0009	0.0011	0.0012	0.0018	0.0016	0.0007
Na	0.2505	0.2822	0.3129	0.2197	0.4506	0.4507	0.4459	0.5631	0.5040	0.5023	0.5940	0.4617	0.5642	0.5880	0.4221	0.4098	0.4897	0.6002
K	0.0007	0.0020	0.0019	0.0009	0.0024	0.0038	0.0026	0.0050	0.0028	0.0059	0.0103	0.0047	0.0066	0.0081	0.0032	0.0033	0.0057	0.0056
Total:	5.0012	5.0029	4.9994	4.9938	4.9904	4.9924	4.9934	4.9879	4.9985	4.9974	5.0062	4.9913	4.9984	4.9988	5.0067	5.0023	5.0054	4.9865
Ca#	74.7	71.4	68.4	77.5	54.2	54.2	54.9	42.6	48.8	48.8	39.0	53.0	42.5	40.4	57.7	58.5	50.4	38.6
1 σ	4.1	3.4	3.7	2.1	2.0	2.2	2.5	9.7	1.4	3.4	11	3.6	1.1	1.1	2.1	0.34	0.16	1.0
An	74.6	71.3	68.3	77.5	54.1	53.9	54.8	42.4	48.7	48.5	38.6	52.8	42.2	40.0	57.5	58.3	50.1	38.4
Ab	25.3	28.5	31.5	22.4	45.7	45.7	45.0	57.1	51.1	50.9	60.3	46.7	57.1	59.1	42.2	41.4	49.4	61.1
Or	0.07	0.20	0.19	0.09	0.24	0.39	0.27	0.51	0.28	0.60	1.05	0.47	0.67	0.82	0.32	0.33	0.58	0.57

Notes: \* = ODP sample designations for sample IDs can be found in Table T1, p. 29. N = averages of a number of point analyses on more than one crystal in a thin section are reported. The analyses were done on a JXA-8800L Superprobe at The University of Queensland. See text for analytical details. P and S in felsic vein samples refer to primary (mostly in host gabbro) and secondary (vein mineral), respectively. F (fine) and C (coarse) in GS samples refer to fine-grained microgabbro "bands" or "veins" entrained or enclosed within coarse-grained gabbro host. Note the compositional similarity between F and C portions of the same samples. An = anorthite, Ab = albite, Or = orthoclase.

Table T3 (continued).

Sample* N:	MS60-19	MS70-20	MS71-21	MS72-22	MS74-23	MS76-24	MS78-25	MS79-26	MS82-27	MS84-28	MS89-29	MS90-30	MS91-31	MS92-32	MS93-33	MS95-34	MS97-35	MS98-36	
	5	3	3	3	6	3	6	3	3	3	3	3	3	3	3	3	3	5	
Major element oxides (wt%):																			
SiO <sub>2</sub>	54.16	57.00	55.56	55.24	54.84	54.68	53.77	53.99	52.84	53.48	54.00	54.25	52.54	52.90	52.98	53.39	53.97	51.82	
TiO <sub>2</sub>	0.06	0.08	0.10	0.07	0.07	0.06	0.06	0.07	0.05	0.08	0.08	0.08	0.07	0.08	0.08	0.05	0.07	0.09	
Al <sub>2</sub> O <sub>3</sub>	30.08	27.60	28.81	29.04	29.86	29.25	28.89	30.02	30.34	30.61	29.86	29.56	30.63	31.13	30.72	30.83	30.17	31.02	
FeOt	0.26	0.28	0.29	0.24	0.29	0.25	0.32	0.24	0.35	0.29	0.26	0.29	0.26	0.35	0.27	0.28	0.27	0.48	
MnO	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.02	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.02	
MgO	0.03	0.04	0.04	0.04	0.03	0.02	0.03	0.03	0.05	0.03	0.03	0.03	0.05	0.04	0.03	0.04	0.05	0.20	
CaO	12.17	10.18	11.23	11.05	11.68	11.62	11.42	11.73	12.14	13.08	11.31	11.56	12.21	13.70	12.67	13.05	11.99	13.57	
Na <sub>2</sub> O	4.33	5.71	5.02	5.21	4.91	4.86	4.94	4.86	4.67	4.75	5.06	5.30	4.61	4.51	4.54	4.61	4.90	4.21	
K <sub>2</sub> O	0.07	0.13	0.09	0.08	0.08	0.06	0.09	0.07	0.06	0.05	0.07	0.10	0.06	0.06	0.06	0.05	0.05	0.08	
P <sub>2</sub> O <sub>5</sub>	0.01	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.00	0.01	0.03	0.03	0.00	0.01	0.00	0.00	0.02	0.02	
Total:	101.19	101.03	101.15	101.02	101.79	100.82	99.57	101.03	100.51	102.44	100.70	101.22	100.44	102.78	101.37	102.32	101.49	101.51	
Calculated cation proportions:																			
Si	2.4188	2.5374	2.4771	2.4673	2.4351	2.4497	2.4426	2.4168	2.3837	2.3751	2.4237	2.4278	2.3720	2.3463	2.3724	2.3715	2.4081	2.3291	
Ti	0.0022	0.0026	0.0034	0.0024	0.0024	0.0019	0.0022	0.0022	0.0017	0.0028	0.0025	0.0027	0.0023	0.0027	0.0026	0.0017	0.0024	0.0029	
Al	1.5830	1.4479	1.5134	1.5285	1.5623	1.5437	1.5467	1.5837	1.6135	1.6016	1.5798	1.5590	1.6297	1.6270	1.6209	1.6134	1.5865	1.6434	
Fe <sup>3+</sup>	0.0020	0.0120	0.0068	0.0038	0.0014	0.0047	0.0088	0.0000	0.0013	0.0205	0.0000	0.0125	0.0000	0.0241	0.0061	0.0142	0.0063	0.0246	
Ca	0.5818	0.4853	0.5361	0.5287	0.5554	0.5572	0.5558	0.5623	0.5866	0.6220	0.5436	0.5541	0.5903	0.6505	0.6077	0.6204	0.5729	0.6533	
Fe <sup>2+</sup>	0.0077	0.0000	0.0042	0.0058	0.0094	0.0047	0.0042	0.0091	0.0120	0.0000	0.0099	0.0035	0.0098	0.0000	0.0068	0.0038	0.0067	0.0020	
Mg	0.0021	0.0025	0.0025	0.0024	0.0020	0.0015	0.0022	0.0020	0.0031	0.0021	0.0023	0.0020	0.0032	0.0029	0.0017	0.0028	0.0031	0.0132	
Na	0.3748	0.4926	0.4333	0.4506	0.4221	0.4223	0.4346	0.4214	0.4084	0.4086	0.4398	0.4600	0.4033	0.3871	0.3940	0.3966	0.4236	0.3667	
K	0.0042	0.0072	0.0049	0.0047	0.0045	0.0031	0.0053	0.0040	0.0032	0.0030	0.0040	0.0059	0.0035	0.0033	0.0032	0.0029	0.0030	0.0044	
Total:	4.9764	4.9876	4.9818	4.9942	4.9946	4.9889	5.0023	5.0015	5.0135	5.0358	5.0056	5.0276	5.0142	5.0438	5.0156	5.0272	5.0126	5.0396	
Ca#	60.9	49.6	55.3	54.0	56.8	56.9	56.1	57.2	58.9	60.3	55.3	54.6	59.4	62.7	60.6	61.0	57.4	64.1	
1 σ	3.5	0.76	1.7	1.0	3.5	4.8	3.5	0.47	2.2	0.90	0.80	3.1	1.9	0.50	2.2	2.8	3.8	1.1	
An	60.6	49.3	55.0	53.7	56.6	56.7	55.8	56.9	58.8	60.2	55.1	54.3	59.2	62.5	60.5	60.8	57.3	63.8	
Ab	39.0	50.0	44.5	45.8	43.0	43.0	43.6	42.7	40.9	39.5	44.5	45.1	40.4	37.2	39.2	38.9	42.4	35.8	
Or	0.43	0.73	0.50	0.48	0.46	0.32	0.53	0.40	0.32	0.29	0.40	0.58	0.35	0.32	0.32	0.29	0.30	0.43	

Table T3 (continued).

Sample* N:	MS99-37 5	MS101-38 5	GS30-1 5 F	GS30-1 5 C	GS31-2 3 F	GS31-2 3 C	GS32-3 3 C	GS32-3 3 F	GS33-4 3 F	GS33-4 3 Needle	GS33-4 3 C	GS34-5 3 C	GS40-6 3 C	GS40-6 3 F	GS40-6 3 C	GS40-6 4 F	GS44-8 3 F	GS44-8 3 C
Major element oxides (wt%):																		
SiO <sub>2</sub>	50.39	50.00	51.95	52.01	52.76	54.51	55.65	54.19	54.22	54.27	53.05	52.00	52.91	54.66	54.94	55.70	53.64	55.31
TiO <sub>2</sub>	0.04	0.06	0.09	0.07	0.06	0.06	0.10	0.03	0.04	0.06	0.07	0.06	0.07	0.08	0.06	0.04	0.06	0.03
Al <sub>2</sub> O <sub>3</sub>	31.94	31.94	30.60	30.56	30.91	29.92	29.27	30.04	30.21	30.17	30.29	30.56	30.27	30.07	30.12	29.40	30.32	28.83
FeOt	0.30	0.27	0.26	0.25	0.24	0.21	0.22	0.08	0.22	0.25	0.31	0.30	0.28	0.18	0.25	0.17	0.22	0.24
MnO	0.00	0.01	0.02	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.01	0.00	0.01	0.00
MgO	0.05	0.19	0.03	0.04	0.03	0.03	0.03	0.02	0.06	0.03	0.03	0.03	0.04	0.01	0.03	0.01	0.02	0.02
CaO	14.64	14.64	13.07	13.02	13.43	11.96	10.94	11.59	11.97	11.86	12.40	13.02	12.69	11.53	11.65	11.00	11.92	10.37
Na <sub>2</sub> O	3.15	3.27	4.68	4.69	4.50	5.00	5.31	4.94	5.03	4.85	4.89	4.83	5.05	5.01	4.97	5.34	4.78	5.65
K <sub>2</sub> O	0.05	0.06	0.09	0.08	0.05	0.08	0.08	0.08	0.05	0.05	0.05	0.06	0.07	0.04	0.06	0.05	0.06	0.09
P <sub>2</sub> O <sub>5</sub>	0.01	0.02	0.00	0.01	0.00	0.02	0.00	0.01	0.01	0.01	0.03	0.02	0.01	0.01	0.00	0.03	0.01	0.02
Total:	100.59	100.46	100.80	100.74	102.00	101.80	101.64	100.97	101.83	101.54	101.17	100.90	101.40	101.64	102.11	101.74	101.03	100.57
Calculated cation proportions:																		
Si	2.2854	2.2734	2.3483	2.3514	2.3544	2.4239	2.4687	2.4238	2.4106	2.4168	2.3827	2.3493	2.3747	2.4295	2.4311	2.4678	2.4024	2.4789
Ti	0.0015	0.0021	0.0029	0.0023	0.0020	0.0021	0.0034	0.0009	0.0014	0.0020	0.0025	0.0022	0.0022	0.0025	0.0019	0.0014	0.0020	0.0009
Al	1.7070	1.7115	1.6300	1.6281	1.6255	1.5675	1.5302	1.5834	1.5830	1.5831	1.6030	1.6267	1.6011	1.5746	1.5705	1.5347	1.6007	1.5230
Fe <sup>3+</sup>	0.0061	0.0130	0.0188	0.0183	0.0181	0.0101	0.0037	0.0000	0.0060	0.0000	0.0132	0.0218	0.0220	0.0000	0.0000	0.0000	0.0000	0.0000
Ca	0.7111	0.7131	0.6329	0.6306	0.6421	0.5694	0.5196	0.5550	0.5703	0.5657	0.5965	0.6301	0.6099	0.5487	0.5520	0.5217	0.5717	0.4977
Fe <sup>2+</sup>	0.0054	0.0039	0.0008	0.0000	0.0000	0.0026	0.0057	0.0029	0.0060	0.0092	0.0033	0.0000	0.0000	0.0068	0.0094	0.0065	0.0082	0.0089
Mg	0.0032	0.0125	0.0018	0.0025	0.0018	0.0017	0.0017	0.0013	0.0041	0.0021	0.0019	0.0023	0.0025	0.0009	0.0018	0.0006	0.0011	0.0016
Na	0.2764	0.2878	0.4096	0.4106	0.3894	0.4306	0.4562	0.4280	0.4337	0.4182	0.4254	0.4227	0.4394	0.4319	0.4263	0.4584	0.4146	0.4903
K	0.0031	0.0032	0.0053	0.0049	0.0030	0.0044	0.0048	0.0043	0.0031	0.0029	0.0030	0.0035	0.0038	0.0025	0.0031	0.0027	0.0034	0.0052
Total:	4.9993	5.0205	5.0504	5.0485	5.0363	5.0123	4.9939	4.9996	5.0181	4.9999	5.0315	5.0587	5.0555	4.9975	4.9961	4.9939	5.0041	5.0065
Ca#	72.0	71.3	60.8	60.6	62.2	56.9	53.2	56.5	56.8	57.5	58.3	59.8	58.1	56.0	56.4	53.2	58.0	50.4
1 σ	2.3	3.9	3.6	3.5	2.1	3.8	3.0	1.6	2.9	0.46	2.5	2.2	0.78	1.9	0.68	0.49	1.3	2.9
An	71.8	71.0	60.4	60.3	62.1	56.7	53.0	56.2	56.6	57.3	58.2	59.7	57.9	55.8	56.2	53.1	57.8	50.1
Ab	27.9	28.7	39.1	39.3	37.6	42.9	46.5	43.3	43.1	42.4	41.5	40.0	41.7	43.9	43.4	46.6	41.9	49.4
Or	0.32	0.32	0.51	0.47	0.29	0.44	0.49	0.44	0.30	0.29	0.29	0.33	0.36	0.26	0.32	0.28	0.34	0.52

Table T3 (continued).

Sample:*	GS59-9	GS59-9	GS64-10	GS64-10	GS77-11	GS77-11	GS83-12	GS83-12	GS86-13	GS86-13	GS87-14	GS88-15	GS88-15	GS96-16	GS100-17	GS100-17	GS51-18	GS51-18
N:	3	3	5	5	5	5	5	5	5	5	3	6	3	3	3	3	3	3
	F	C	F	C	C	F	F	C	F	C	F	C	F	C	F	C	C	F
Major element oxides (wt%):																		
SiO <sub>2</sub>	57.79	58.01	56.69	55.57	52.49	50.24	49.07	47.97	52.59	55.51	53.05	52.67	52.91	54.22	52.99	54.13	57.46	55.64
TiO <sub>2</sub>	0.02	0.06	0.04	0.05	0.06	0.10	0.05	0.05	0.04	0.07	0.06	0.06	0.04	0.08	0.07	0.08	0.06	0.05
Al <sub>2</sub> O <sub>3</sub>	28.33	28.30	29.19	29.49	30.27	31.77	32.60	33.37	30.17	29.11	30.65	30.55	30.41	30.21	30.40	30.17	27.75	28.30
FeO <sub>t</sub>	0.21	0.25	0.16	0.20	0.27	0.22	0.20	0.31	0.22	0.29	0.22	0.23	0.22	0.25	0.25	0.28	0.17	0.14
MnO	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00
MgO	0.02	0.03	0.02	0.02	0.04	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.01	0.01
CaO	9.87	9.72	10.53	11.03	12.59	14.44	15.41	16.32	12.57	10.95	13.13	13.01	12.55	11.76	12.53	12.25	9.25	9.64
Na <sub>2</sub> O	6.02	6.05	5.60	5.29	5.01	3.26	2.88	2.21	4.93	5.47	4.58	4.85	4.79	4.91	4.84	5.00	6.30	6.12
K <sub>2</sub> O	0.10	0.09	0.04	0.06	0.08	0.05	0.04	0.05	0.09	0.11	0.06	0.07	0.05	0.05	0.06	0.06	0.12	0.12
P <sub>2</sub> O <sub>5</sub>	0.01	0.01	0.01	0.01	0.03	0.02	0.01	0.01	0.03	0.02	0.01	0.03	0.04	0.02	0.01	0.04	0.02	0.03
Total:	102.40	102.53	102.29	101.75	100.86	100.14	100.31	100.33	100.67	101.58	101.80	101.50	101.05	101.54	101.22	102.06	101.15	100.07
Calculated cation proportions:																		
Si	2.5352	2.5400	2.4929	2.4627	2.3690	2.2879	2.2382	2.1935	2.3758	2.4672	2.3693	2.3626	2.3780	2.4153	2.3780	2.4061	2.5496	2.5027
Ti	0.0008	0.0020	0.0012	0.0016	0.0022	0.0035	0.0016	0.0016	0.0014	0.0024	0.0020	0.0019	0.0013	0.0028	0.0024	0.0027	0.0019	0.0016
Al	1.4644	1.4599	1.5125	1.5399	1.6097	1.7050	1.7527	1.7982	1.6062	1.5252	1.6132	1.6150	1.6112	1.5856	1.6082	1.5801	1.4507	1.5003
Fe <sup>3+</sup>	0.0001	0.0000	0.0000	0.0000	0.0191	0.0037	0.0075	0.0066	0.0166	0.0087	0.0156	0.0205	0.0112	0.0000	0.0126	0.0125	0.0000	0.0000
Ca	0.4636	0.4557	0.4959	0.5235	0.6083	0.7045	0.7534	0.7993	0.6081	0.5217	0.6281	0.6251	0.6045	0.5608	0.6028	0.5829	0.4394	0.4643
Fe <sup>2+</sup>	0.0075	0.0091	0.0060	0.0074	0.0009	0.0048	0.0029	0.0051	0.0010	0.0039	0.0000	0.0000	0.0029	0.0092	0.0032	0.0035	0.0064	0.0053
Mg	0.0012	0.0017	0.0011	0.0015	0.0029	0.0014	0.0016	0.0020	0.0014	0.0016	0.0014	0.0016	0.0014	0.0018	0.0022	0.0018	0.0008	0.0010
Na	0.5120	0.5130	0.4772	0.4538	0.4384	0.2875	0.2543	0.1958	0.4315	0.4711	0.3967	0.4212	0.4169	0.4237	0.4213	0.4306	0.5414	0.5339
K	0.0053	0.0051	0.0024	0.0036	0.0046	0.0030	0.0024	0.0027	0.0051	0.0060	0.0033	0.0040	0.0030	0.0027	0.0037	0.0036	0.0068	0.0066
Total:	4.9901	4.9866	4.9893	4.9941	5.0551	5.0011	5.0145	5.0049	5.0471	5.0079	5.0295	5.0520	5.0305	5.0019	5.0344	5.0238	4.9971	5.0158
Ca#	47.5	47.0	51.0	53.6	58.1	71.0	74.9	80.3	58.6	52.5	61.3	59.7	59.1	57.0	58.8	57.5	44.8	46.5
1 $\sigma$	0.56	0.14	0.39	1.7	3.8	4.2	7.8	4.5	2.0	3.0	1.1	1.9	3.8	0.41	3.0	2.1	0.65	0.59
An	47.3	46.8	50.8	53.4	57.9	70.8	74.6	80.1	58.2	52.2	61.1	59.5	59.0	56.8	58.6	57.3	44.5	46.2
Ab	52.2	52.7	48.9	46.3	41.7	28.9	25.2	19.6	41.3	47.2	38.6	40.1	40.7	42.9	41.0	42.3	54.8	53.1
Or	0.54	0.52	0.25	0.37	0.43	0.30	0.24	0.27	0.48	0.60	0.32	0.39	0.30	0.27	0.36	0.36	0.69	0.66

Table T3 (continued).

Sample* N:	GS55-19 3 ?	GS85-20 3 F	GS85-20 2 C	GS102-21 4 F	GS102-21 3 C	FV2-1 5 P	FV2-1 6 S	FV5-2 3 P1	FV5-2 3 P2	FV5-2 9 S	FV13-3 3 P	FV13-3 6 S1	FV13-3 6 S2	FV21-4 3 P	FV21-4 3 S	FV19-5 3 P	FV19-5 9 S	FV29-5 6 P
Major element oxides (wt%):																		
SiO <sub>2</sub>	53.01	52.01	50.80	51.23	52.84	51.44	59.19	47.61	50.93	64.29	51.82	61.40	66.00	54.14	64.40	55.47	66.89	54.11
TiO <sub>2</sub>	0.07	0.04	0.07	0.07	0.07	0.04	0.00	0.02	0.05	0.02	0.08	0.02	0.02	0.07	0.02	0.06	0.01	0.07
Al <sub>2</sub> O <sub>3</sub>	29.63	30.95	31.38	31.08	30.00	32.06	26.20	34.09	32.55	21.93	30.68	25.01	21.86	29.14	22.62	29.82	21.14	29.97
FeOt	0.22	0.23	0.32	0.24	0.27	0.14	0.04	0.16	0.11	0.06	0.21	0.23	0.13	0.25	0.17	0.24	0.21	0.25
MnO	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00
MgO	0.02	0.02	0.06	0.02	0.03	0.02	0.00	0.00	0.03	0.00	0.02	0.02	0.01	0.01	0.00	0.03	0.00	0.04
CaO	11.94	13.49	13.98	13.63	12.37	14.03	7.86	17.16	15.35	3.64	13.17	6.01	2.72	11.37	3.82	11.60	1.35	11.96
Na <sub>2</sub> O	5.50	4.61	3.96	4.59	5.09	3.77	7.12	2.51	3.54	9.44	4.30	8.10	10.04	5.40	9.57	4.86	10.81	5.05
K <sub>2</sub> O	0.06	0.05	0.04	0.04	0.06	0.02	0.02	0.00	0.03	0.18	0.06	0.26	0.13	0.14	0.13	0.07	0.05	0.08
P <sub>2</sub> O <sub>5</sub>	0.01	0.01	0.03	0.01	0.02	0.00	0.00	0.01	0.01	0.00	0.02	0.01	0.00	0.00	0.01	0.00	0.01	0.01
Total:	100.47	101.43	100.65	100.93	100.77	101.55	100.47	101.59	102.61	99.57	100.37	101.08	100.92	100.54	100.76	102.18	100.49	101.56
Calculated cation proportions:																		
Si	2.3974	2.3378	2.3043	2.3181	2.3841	2.3060	2.6300	2.1581	2.2699	2.8479	2.3490	2.7030	2.8773	2.4386	2.8244	2.4494	2.9191	2.4135
Ti	0.0024	0.0014	0.0025	0.0024	0.0024	0.0015	0.0000	0.0008	0.0016	0.0005	0.0026	0.0007	0.0006	0.0024	0.0007	0.0020	0.0003	0.0022
Al	1.5796	1.6398	1.6772	1.6570	1.5952	1.6934	1.3712	1.8215	1.7094	1.1452	1.6387	1.2977	1.1227	1.5470	1.1689	1.5518	1.0875	1.5759
Fe <sup>3+</sup>	0.0205	0.0210	0.0161	0.0226	0.0184	0.0037	0.0027	0.0195	0.0191	0.0068	0.0096	0.0011	0.0005	0.0121	0.0060	0.0035	0.0006	0.0101
Ca	0.5785	0.6493	0.6793	0.6606	0.5978	0.6736	0.3739	0.8334	0.7329	0.1728	0.6392	0.2833	0.1270	0.5484	0.1795	0.5486	0.0635	0.5716
Fe <sup>2+</sup>	0.0000	0.0000	0.0029	0.0000	0.0000	0.0042	0.0012	0.0000	0.0000	0.0003	0.0029	0.0073	0.0043	0.0035	0.0034	0.0056	0.0071	0.0047
Mg	0.0013	0.0015	0.0039	0.0015	0.0018	0.0015	0.0001	0.0000	0.0021	0.0002	0.0011	0.0012	0.0004	0.0004	0.0001	0.0019	0.0001	0.0029
Na	0.4819	0.4019	0.3480	0.4020	0.4451	0.3273	0.6132	0.2203	0.3059	0.8103	0.3776	0.6910	0.8485	0.4708	0.8135	0.4157	0.9137	0.4369
K	0.0035	0.0026	0.0025	0.0022	0.0035	0.0012	0.0012	0.0001	0.0017	0.0102	0.0035	0.0145	0.0071	0.0080	0.0070	0.0040	0.0030	0.0046
Total:	5.0652	5.0554	5.0365	5.0664	5.0483	5.0123	4.9936	5.0539	5.0425	4.9942	5.0243	4.9999	4.9884	5.0311	5.0035	4.9826	4.9949	5.0224
Ca#	54.5	61.8	66.2	62.2	57.3	67.3	37.9	79.1	70.6	17.6	62.9	29.1	13.0	53.9	18.1	56.8	6.6	56.7
1 σ	1.3	1.2	1.1	1.4	0.83	3.6	7.1	1.5	0.48	4.5	1.4	3.5	1.1	2.4	0.35	3.1	7.4	2.9
An	54.4	61.6	66.0	62.0	57.1	67.2	37.8	79.1	70.4	17.4	62.6	28.7	12.9	53.4	18.0	56.7	6.5	56.4
Ab	45.3	38.1	33.8	37.8	42.5	32.7	62.0	20.9	29.4	81.6	37.0	69.9	86.4	45.8	81.3	42.9	93.2	43.1
Or	0.33	0.25	0.24	0.21	0.34	0.12	0.12	0.01	0.16	1.03	0.35	1.47	0.72	0.78	0.70	0.42	0.30	0.46

Table T3 (continued).

Sample:*	FV29-5	FV35-6	FV35-6	FV35-6	FV37-7	FV37-7	FV37-7	FV37-7	FV39-8	FV39-8	FV45-9a	FV45-9a	FV45-9b	FV45-9b	FV47-10	FV47-10	FV50-11	FV58-13
N:	7	3	7	3	3	3	4	5	6	6	3	6	3	5	3	3	21	7
	S	P	S1	S2	P1	P2	P3	P4	P	S	P	S	P	S	S	P	P	S
Major element oxides (wt%):																		
SiO <sub>2</sub>	66.44	52.82	62.08	66.74	51.42	52.31	53.23	55.10	53.49	67.83	51.60	65.70	51.86	55.23	62.94	52.48	53.40	56.14
TiO <sub>2</sub>	0.03	0.06	0.01	0.00	0.06	0.07	0.06	0.06	0.07	0.01	0.04	0.01	0.03	0.12	0.01	0.06	0.05	0.08
Al <sub>2</sub> O <sub>3</sub>	21.25	30.01	23.83	20.73	30.83	30.35	29.74	29.91	30.48	20.15	30.83	21.54	30.66	29.36	23.63	30.24	30.24	28.21
FeOt	0.16	0.29	0.19	0.15	0.20	0.21	0.21	0.20	0.24	0.12	0.17	0.09	0.15	0.19	0.22	0.15	0.23	0.24
MnO	0.01	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.01	0.00	0.01	0.01	0.01
MgO	0.01	0.02	0.00	0.00	0.02	0.03	0.02	0.02	0.02	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.01
CaO	1.98	12.38	5.53	1.57	13.34	12.78	12.07	11.34	12.45	0.33	13.34	2.25	13.14	10.98	4.77	12.65	12.51	10.10
Na <sub>2</sub> O	10.38	5.10	8.26	10.35	4.67	4.88	5.27	5.09	4.69	11.29	4.58	10.11	4.74	5.37	8.76	4.60	4.50	5.80
K <sub>2</sub> O	0.13	0.08	0.10	0.11	0.06	0.09	0.08	0.06	0.04	0.04	0.05	0.25	0.06	0.11	0.35	0.12	0.06	0.09
P <sub>2</sub> O <sub>5</sub>	0.00	0.00	0.01	0.00	0.01	0.03	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.02	0.01	0.02	0.02	0.01
Total:	100.39	100.81	100.04	99.67	100.62	100.77	100.72	101.80	101.50	99.81	100.63	99.96	100.68	101.41	100.69	100.35	101.05	100.70
Calculated cation proportions:																		
Si	2.9063	2.3830	2.7520	2.9331	2.3311	2.3633	2.4001	2.4426	2.3893	2.9698	2.3366	2.8894	2.3464	2.4581	2.7717	2.3757	2.3951	2.5094
Ti	0.0008	0.0021	0.0004	0.0002	0.0022	0.0023	0.0020	0.0019	0.0023	0.0003	0.0012	0.0004	0.0012	0.0039	0.0002	0.0021	0.0016	0.0028
Al	1.0953	1.5955	1.2448	1.0735	1.6466	1.6158	1.5805	1.5624	1.6043	1.0396	1.6450	1.1159	1.6344	1.5398	1.2265	1.6134	1.5988	1.4856
Fe <sup>3+</sup>	0.0020	0.0195	0.0041	0.0004	0.0201	0.0186	0.0175	0.0000	0.0081	0.0005	0.0171	0.0044	0.0180	0.0038	0.0044	0.0089	0.0047	0.0033
Ca	0.0929	0.5983	0.2628	0.0740	0.6474	0.6185	0.5829	0.5382	0.5958	0.0156	0.6470	0.1056	0.6366	0.5234	0.2250	0.6137	0.6013	0.4835
Fe <sup>2+</sup>	0.0050	0.0000	0.0040	0.0052	0.0000	0.0000	0.0000	0.0075	0.0040	0.0040	0.0000	0.0012	0.0000	0.0054	0.0062	0.0021	0.0040	0.0055
Mg	0.0004	0.0015	0.0001	0.0000	0.0015	0.0023	0.0013	0.0012	0.0014	0.0001	0.0009	0.0002	0.0009	0.0006	0.0003	0.0000	0.0009	0.0008
Na	0.8798	0.4458	0.7098	0.8808	0.4102	0.4271	0.4609	0.4373	0.4057	0.9581	0.4018	0.8611	0.4156	0.4629	0.7472	0.4027	0.3913	0.5024
K	0.0070	0.0048	0.0057	0.0064	0.0035	0.0049	0.0048	0.0036	0.0022	0.0021	0.0027	0.0137	0.0033	0.0064	0.0196	0.0071	0.0033	0.0050
Total:	4.9896	5.0505	4.9838	4.9736	5.0626	5.0528	5.0499	4.9947	5.0131	4.9900	5.0525	4.9918	5.0565	5.0043	5.0010	5.0256	5.0009	4.9984
Ca#	9.6	57.3	27.0	7.8	61.2	59.1	55.8	55.2	59.5	1.6	61.7	10.9	60.5	53.0	23.4	60.6	60.6	49.0
1 σ	4.7	2.6	3.5	3.5	0.67	1.1	0.46	1.8	2.6	2.0	0.16	6.1	2.1	6.6	12.0	5.5	3.8	3.3
An	9.5	57.0	26.9	7.7	61.0	58.9	55.6	55.0	59.4	1.6	61.5	10.8	60.3	52.7	22.7	60.0	60.4	48.8
Ab	89.8	42.5	72.6	91.6	38.7	40.7	44.0	44.7	40.4	98.2	38.2	87.8	39.4	46.6	75.3	39.4	39.3	50.7
Or	0.72	0.46	0.59	0.66	0.33	0.47	0.46	0.36	0.22	0.22	0.26	1.40	0.31	0.64	2.0	0.69	0.33	0.51

Table T3 (continued).

Sample:*	FV61-14	FV61-14	FV62-15	FV62-15	FV63-16	FV63-16	FV65-17	FV65-17	FV66-18	FV66-18	FV67-19	FV67-19	FV81-20	FV81-20	FV94-21
N:	11	17	6	3	4	3	5	6	7	3	3	7	2	2	4
		S	P	S	P	S	P	S	P	S	P	S	P1	P2	S1
Major element oxides (wt%):															
SiO <sub>2</sub>	55.06	66.88	54.95	62.77	54.31	62.74	54.15	66.06	54.04	64.79	54.20	67.31	52.48	54.01	59.26
TiO <sub>2</sub>	0.05	0.01	0.05	0.03	0.09	0.02	0.03	0.01	0.06	0.01	0.05	0.00	0.09	0.07	0.04
Al <sub>2</sub> O <sub>3</sub>	28.58	21.37	28.82	23.91	28.64	23.90	29.64	22.38	29.71	23.02	29.28	21.41	29.87	29.20	25.81
FeOt	0.19	0.04	0.22	0.17	0.23	0.24	0.19	0.13	0.21	0.22	0.18	0.04	0.24	0.24	0.32
MnO	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01
MgO	0.01	0.00	0.02	0.01	0.01	0.01	0.02	0.00	0.01	0.01	0.00	0.00	0.02	0.02	0.01
CaO	10.89	1.83	11.19	5.13	10.91	5.22	11.79	2.88	11.92	3.83	11.52	1.50	12.47	11.45	7.52
Na <sub>2</sub> O	5.42	10.44	5.44	8.74	5.47	8.45	5.03	9.93	4.89	9.05	5.23	10.63	4.60	5.09	7.11
K <sub>2</sub> O	0.08	0.16	0.07	0.23	0.08	0.47	0.06	0.21	0.08	0.67	0.05	0.08	0.09	0.08	0.25
P <sub>2</sub> O <sub>5</sub>	0.03	0.01	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.04	0.00	0.02	0.01	0.03
Total:	100.33	100.77	100.82	101.02	99.79	101.12	100.95	101.66	100.98	101.63	100.56	100.99	99.90	100.18	100.34
Calculated cation proportions:															
Si	2.4766	2.9113	2.4638	2.7575	2.4600	2.7567	2.4274	2.8612	2.4229	2.8194	2.4382	2.9191	2.3857	2.4383	2.6400
Ti	0.0015	0.0003	0.0016	0.0008	0.0031	0.0007	0.0011	0.0004	0.0019	0.0005	0.0016	0.0001	0.0029	0.0025	0.0012
Al	1.5150	1.0964	1.5224	1.2377	1.5286	1.2378	1.5655	1.1433	1.5695	1.1815	1.5523	1.0942	1.6000	1.5531	1.3549
Fe <sup>3+</sup>	0.0069	0.0000	0.0121	0.0039	0.0083	0.0048	0.0059	0.0012	0.0057	0.0011	0.0079	0.0000	0.0114	0.0062	0.0039
Ca	0.5246	0.0854	0.5373	0.2413	0.5291	0.2457	0.5661	0.1344	0.5725	0.1794	0.5551	0.0699	0.6068	0.5537	0.3587
Fe <sup>2+</sup>	0.0017	0.0016	0.0004	0.0023	0.0020	0.0042	0.0014	0.0035	0.0027	0.0068	0.0014	0.0014	0.0004	0.0027	0.0079
Mg	0.0010	0.0001	0.0012	0.0004	0.0007	0.0007	0.0011	0.0002	0.0006	0.0005	0.0001	0.0000	0.0013	0.0016	0.0006
Na	0.4719	0.8808	0.4728	0.7438	0.4798	0.7191	0.4370	0.8332	0.4251	0.7626	0.4563	0.8930	0.4053	0.4448	0.6137
K	0.0043	0.0088	0.0039	0.0129	0.0049	0.0264	0.0033	0.0116	0.0044	0.0371	0.0030	0.0043	0.0051	0.0044	0.0140
Total:	5.0034	4.9847	5.0155	5.0007	5.0164	4.9961	5.0090	4.9889	5.0054	4.9889	5.0158	4.9819	5.0189	5.0073	4.9949
Ca#	52.6	8.8	53.2	24.5	52.4	25.4	56.4	13.8	57.4	18.8	54.9	7.2	60.0	55.4	36.9
1 $\sigma$	3.5	4.0	2.5	0.6	1.6	3.3	1.3	10.3	2.7	9.4	0.3	3.1	1.2	3.8	2.1
An	52.4	8.8	53.0	24.2	52.2	24.8	56.2	13.7	57.1	18.3	54.7	7.2	59.7	55.2	36.4
Ab	47.2	90.3	46.6	74.5	47.3	72.5	43.4	85.1	42.4	77.9	45.0	92.3	39.8	44.3	62.2
Or	0.43	0.90	0.38	1.3	0.48	2.7	0.33	1.2	0.44	3.79	0.29	0.44	0.50	0.44	1.42