APPENDIX 3: MICROPROBE ANALYSES OF PLAGIOCLASE

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

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SIO2	53.34	51.34	52.18	51.19	50.41	51.12	51.26	52.14
TIO2	.02	.05	.04	.04	.05	.02	.12	.05
AL2O3	31.04	31.63	31.73	32.05	32.35	32.34	31.15	30.12
FeO*	.15	.20	.18	.24	.32	.35	.24	.37
MNO	.00	.00	.00	.00	.00	.00	.00	.01
MGO	.01	.02	.01	.00	.01	.02	.05	.19
CAO	12.57	13.23	13.20	13.63	14.46	14.16	13.54	13.18
NA2O	4.27	3.84	4.02	3.77	3.33	3.39	3.69	3.72
K2O	.07	.06	.06	.09	.08	.08	.05	.08
TOTAL	101.15	100.88	101.41	101.00	100.71	101.48	100.08	99.85
NO. OF IONS/8 OXYGENS								
SI	2.347	2.332	2.335	2.306	2.261	2.294	2.328	2.370
TI	.001	.002	.001	.001	.002	.001	.004	.002
AL	1.637	1.677	1.674	1.701	1.725	1.710	1.667	1.614
FE	.006	.008	.007	.009	.012	.013	.009	.014
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.001	.000	.000	.000	.001	.003	.013
CA	.603	.638	.633	.658	.686	.681	.659	.642
NA	.372	.335	.349	.329	.292	.295	.325	.326
K	.004	.004	.003	.005	.005	.005	.003	.004
TOTAL CATIONS	4.994	4.996	5.002	5.009	5.003	5.000	4.998	4.987
AN CONTENT	61.7	65.3	64.3	66.3	69.8	69.4	66.8	65.9

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	611-3-1C 1-3	611-3-1C 2-1	611-3-1C 2-2	611-3-1C 2-3	611-3-1C 3-1	611-3-1C 3-2	611-1-1HP 7U	611-4-1HP 9U
SIO2	56.95	56.30	56.44	64.90	63.43	57.84	60.62	60.41
TIO2	.08	.09	.11	.00	.04	.11	.00	.00
AL2O3	30.70	26.91	27.13	23.29	23.55	27.34	22.76	24.26
FEO*	.21	.95	.21	.28	.32	.62	.00	.00
MNO	.01	.00	.00	.00	.00	.00	.00	.00
MGO	.12	.00	.00	.00	.00	.00	.00	.00
CAO	13.45	7.68	7.99	1.64	3.62	8.78	5.68	6.65
NA2O	3.54	5.74	6.04	10.07	9.02	6.41	8.79	8.13
K2O	.07	.06	.08	.05	.07	.07	.07	.05
TOTAL	99.59	100.62	100.61	100.24	100.06	101.16	98.32	99.44
NO. OF IONS/8 OXYGENS								
SI	2.538	2.623	2.594	2.841	2.796	2.566	2.753	2.705
TI	.003	.003	.004	.000	.001	.004	.000	.000
AL	1.655	1.403	1.419	1.201	1.224	1.429	1.215	1.278
FE	.008	.032	.008	.010	.012	.023	.000	.000
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.008	.000	.000	.000	.000	.000	.000	.000
CA	.678	.364	.360	.077	.171	.417	.285	.319
NA	.313	.492	.572	.855	.771	.551	.771	.706
K	.004	.003	.005	.003	.004	.004	.004	.003
TOTAL CATIONS	4.998	4.926	4.961	4.967	4.978	4.994	5.029	5.010
AN CONTENT	66.1	42.4	39.7	8.2	18.1	42.9	26.9	31.0

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	611-4-1AP 10U	611-4-1AP 13U	611-4-1AP 15U	611-4-1AP 16U	611-4-1AP 19U	611-4-1AP 20U	611-4-1AP 21U	611-5-1 4U
SIO2	61.61	59.78	61.45	60.24	59.75	60.20	61.32	54.12
TIO2	.00	.00	.00	.00	.00	.00	.00	.00
AL2O3	23.89	23.74	23.36	23.37	23.58	23.52	23.75	27.86
FEO*	.00	.00	.00	.00	.00	.00	.00	.11
MNO	.00	.00	.00	.00	.00	.00	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	6.23	6.98	5.66	6.21	6.69	6.75	5.70	11.97
NA2O	8.30	7.92	8.73	8.44	8.56	8.08	8.21	4.76
K2O	.05	.04	.04	.07	.08	.02	.04	.01
TOTAL	100.33	97.96	99.44	98.33	98.06	98.57	99.02	98.85
NO. OF IONS/8 OXYGENS								
SI	2.737	2.714	2.747	2.727	2.715	2.720	2.745	2.473
TI	.000	.000	.000	.000	.000	.000	.000	.000
AL	1.247	1.271	1.231	1.248	1.263	1.253	1.253	1.501
FE	.000	.000	.000	.000	.000	.000	.000	.004
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.296	.315	.261	.301	.296	.327	.273	.586
NA	.713	.697	.756	.741	.754	.708	.712	.423
K	.003	.002	.002	.004	.005	.001	.002	.001
TOTAL CATIONS	4.997	5.000	5.017	5.021	5.033	5.008	4.986	4.988
AN CONTENT	29.4	31.1	27.0	28.8	28.1	31.6	27.7	58.0

APPENDIX 3a. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	611-5-1 7U	611-5-1 11U	611-5-1 17U	611-5-1 19U	611-5-1 22U	611-5-2A 2U	611-5-2A 6U	611-5-2A 10U
SIO2	53.52	53.94	53.91	53.96	54.64	52.91	53.24	54.21
TIO2	.00	.04	.07	.04	.06	.00	.00	.05
AL203	27.62	27.56	27.99	29.03	27.23	28.00	27.93	29.69
FEO*	.06	.07	.14	.11	.15	.00	.00	.10
MNO	.00	.00	.00	.00	.00	.00	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	11.59	11.32	11.31	12.03	11.42	12.05	11.88	11.61
NA2O	5.05	5.11	5.17	5.04	5.05	5.09	4.92	5.24
K2O	.02	.02	.03	.00	.01	.00	.00	.05
TOTAL	97.88	98.06	98.82	100.21	97.96	98.05	97.97	100.95
NO. OF IONS/8 OXYGENS								
SI	2.471	2.482	2.466	2.436	2.490	2.444	2.457	2.428
TI	.000	.001	.002	.001	.002	.000	.000	.002
AL	1.503	1.495	1.509	1.545	1.480	1.525	1.520	1.568
FE	.003	.003	.005	.004	.006	.000	.000	.004
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.573	.558	.564	.582	.564	.596	.587	.557
NA	.452	.456	.458	.441	.451	.456	.440	.455
K	.001	.001	.002	.000	.001	.000	.000	.003
TOTAL CATIONS	5.004	4.997	5.007	5.010	4.994	5.021	5.004	5.016
AN CONTENT	55.8	55.0	55.1	56.9	55.5	56.7	57.2	54.9

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	611-5-2R 17A	611-5-2R 19A	611-6-1 1-1	611-6-1 1-2	611-6-1 1-3	611-6-1 1-4	611-6-1 1-5	612-3-1R 1
SiO2	52.63	53.53	53.62	49.49	50.29	51.54	51.76	52.96
TiO2	.07	.37	.03	.02	.04	.06	.04	.20
AL2O3	28.34	29.25	32.44	32.32	32.22	31.36	31.04	30.18
FeO*	.09	.11	.18	.23	.23	.16	.20	.35
MnO	.00	.00	.00	.00	.00	.00	.00	.22
MgO	.00	.00	.02	.00	.01	.01	.00	.16
CaO	12.02	11.05	14.41	14.66	14.24	13.35	13.26	11.51
Na2O	5.17	5.40	3.16	2.99	3.25	3.67	3.87	5.16
K2O	.06	.07	.05	.07	.09	.10	.09	.12
TOTAL	98.48	100.78	100.80	99.78	100.37	100.24	100.25	100.80
NO. OF IONS/8 OXYGENS								
SI	2.428	2.424	2.282	2.262	2.282	2.334	2.344	2.385
TI	.002	.013	.001	.001	.001	.002	.002	.007
AL	1.540	1.550	1.727	1.741	1.723	1.674	1.657	1.602
FE	.003	.004	.007	.009	.009	.006	.008	.013
MN	.000	.000	.000	.000	.000	.000	.000	.008
MG	.000	.000	.001	.000	.001	.001	.000	.011
CA	.663	.561	.697	.718	.692	.647	.643	.555
NA	.463	.471	.277	.265	.286	.322	.339	.445
K	.004	.004	.003	.004	.005	.006	.005	.007
TOTAL CATIONS	5.031	5.026	4.994	5.001	5.000	4.992	4.998	5.033
AN CONTENT	56.9	54.2	71.3	72.7	70.4	66.4	65.1	55.1

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	612-3-1A 2	612-3-1A 3	612-3-1A 4	612-3-1A 5	612-3-1A 7	612-3-1A 8	612-3-1A 9	613-1-1 61311
SIO2	53.42	53.76	52.56	53.18	52.69	52.49	54.03	56.44
TIO2	.25	.26	.20	.22	.20	.20	.23	.02
AL2O3	29.54	29.44	29.54	29.04	29.47	29.56	27.98	26.62
FEO*	.37	.34	.34	.39	.37	.40	.31	.18
MNO	.23	.23	.21	.19	.21	.20	.19	.00
MGO	.17	.16	.15	.19	.14	.14	.15	.00
CAO	11.19	10.86	11.07	10.60	11.23	11.34	9.64	8.96
NA2O	5.12	5.30	5.01	5.45	4.99	4.83	5.88	6.41
K2O	.16	.11	.11	.16	.11	.12	.11	.14
TOTAL	100.00	100.46	99.21	99.42	99.41	99.28	98.52	99.77
NO. OF IONS/8 OXYGENS								
SI	2.405	2.442	2.401	2.423	2.403	2.397	2.475	2.540
TI	.007	.009	.007	.008	.007	.007	.008	.001
AL	1.568	1.564	1.591	1.560	1.584	1.592	1.511	1.465
FE	.014	.013	.013	.015	.014	.015	.012	.007
MN	.009	.009	.008	.007	.008	.008	.007	.000
MG	.011	.011	.010	.013	.010	.010	.010	.000
CA	.544	.524	.542	.518	.549	.555	.473	.432
NA	.460	.463	.444	.481	.441	.428	.522	.559
K	.009	.006	.006	.009	.006	.007	.006	.008
TOTAL CATIONS	5.029	5.021	5.022	5.034	5.022	5.018	5.026	5.011
AN CONTENT	54.2	52.8	54.6	51.4	55.1	56.1	47.3	43.2

APPENDIX 5. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	613-1-1 1-1	613-1-1 1-2	613-1-1 1-3	613-1-1 1-4	613-1-1 1-5	613-1-1 2-1	613-1-1 2-2	613-1-1 2-3
SIO2	59.48	59.70	59.52	60.54	58.49	56.65	57.78	59.20
TIO2	.02	.03	.03	.02	.00	.02	.00	.03
AL2O3	25.07	25.07	25.09	25.35	26.75	28.04	27.15	26.00
FEO*	.38	.18	.24	.21	.26	.13	.09	.13
MNO	.00	.00	.00	.00	.00	.00	.00	.00
MGO	.00	.00	.01	.00	.00	.00	.00	.00
CAO	6.14	6.31	6.31	6.39	7.54	9.24	8.86	7.00
NA2O	7.65	7.91	7.76	7.66	8.15	6.15	6.38	7.45
K2O	.15	.14	.24	.25	.07	.07	.08	.16
TOTAL	99.29	99.35	99.19	100.41	101.06	100.29	100.34	99.97
NO. OF IONS/8 OXYGENS								
SI	2.686	2.677	2.674	2.683	2.595	2.533	2.577	2.641
TI	.001	.001	.001	.001	.000	.001	.000	.001
AL	1.323	1.324	1.328	1.324	1.399	1.478	1.427	1.367
FE	.014	.007	.009	.008	.010	.005	.003	.005
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.295	.303	.304	.303	.349	.443	.423	.335
NA	.655	.688	.676	.658	.701	.533	.552	.644
K	.008	.008	.014	.014	.004	.004	.004	.009
TOTAL CATIONS	4.982	5.008	5.006	4.991	5.058	4.996	4.987	5.002
AN CONTENT	30.8	30.3	30.6	31.1	33.1	45.2	43.2	33.9

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	H3-1-1 2-4	614-2-1 61421	614-2-1 1-1	614-2-1 1-2	614-2-1 1-3	614-2-1 2-1	614-2-1 2-2	616-1-1 61671
SIO2	59.59	56.54	57.39	57.12	56.28	56.60	56.69	51.93
TIO2	.03	.01	.01	.00	.00	.02	.01	.02
AL2O3	25.42	27.31	27.74	26.97	27.73	27.28	27.57	31.33
FeO*	.15	.22	.19	.08	.04	.15	.16	.11
MNO	.00	.00	.00	.00	.02	.00	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	6.47	9.22	8.64	8.49	9.15	9.07	9.09	13.52
NA2O	7.62	6.26	6.34	6.66	6.39	6.30	6.23	4.08
K2O	.16	.13	.14	.05	.05	.15	.14	.08
TOTAL	99.63	99.68	100.65	99.38	99.66	99.57	99.89	101.07
NO. OF IONS/8 OXYGENS								
SI	2.665	2.547	2.555	2.573	2.534	2.551	2.546	2.336
TI	.001	.000	.000	.000	.000	.001	.000	.001
AL	1.340	1.450	1.455	1.432	1.472	1.449	1.459	1.661
FE	.006	.008	.007	.003	.002	.006	.006	.004
MN	.000	.000	.000	.000	.001	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.310	.445	.422	.410	.442	.438	.437	.651
NA	.678	.547	.547	.582	.558	.550	.542	.356
K	.009	.007	.008	.003	.003	.009	.008	.005
TOTAL CATIONS	5.008	5.005	4.995	5.003	5.010	5.003	4.999	5.013
AN CONTENT	31.1	44.5	43.2	41.2	44.1	43.9	44.3	64.3

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	615-1-1 1	615-1-1 2-1	615-1-1 2-2	615-1-1 2-3	615-1-1 2-4	615-1-1 2-5	615-2-1 5A	615-2-1 7A
SIO2	52.53	52.44	52.75	53.27	52.75	52.43	51.69	51.34
TIO2	.05	.05	.06	.00	.04	.07	.02	.10
AL2O3	30.64	30.15	30.02	30.52	30.21	30.15	28.96	28.86
FEO*	.18	.16	.13	.17	.13	.17	.26	.35
MNO	.06	.00	.01	.00	.00	.00	.00	.00
MGO	.02	.01	.02	.00	.01	.02	.00	.00
CAO	12.02	12.18	12.12	12.41	11.99	12.21	13.17	13.94
NA2O	4.23	4.65	4.69	4.32	4.76	4.59	4.20	3.90
K2O	.10	.08	.10	.05	.07	.10	.03	.01
TOTAL	100.56	99.73	99.89	100.55	99.97	99.74	98.33	98.50
NO. OF IONS/8 OXYGENS								
SI	2.369	2.383	2.392	2.388	2.390	2.383	2.390	2.376
TI	.002	.002	.002	.000	.001	.002	.001	.003
AL	1.629	1.615	1.604	1.619	1.613	1.615	1.579	1.575
FE	.007	.006	.005	.007	.005	.006	.010	.014
MN	.002	.000	.000	.000	.000	.000	.000	.000
MG	.001	.001	.001	.000	.001	.001	.000	.000
CA	.619	.593	.589	.599	.582	.595	.652	.691
NA	.369	.410	.412	.377	.418	.404	.376	.350
K	.006	.005	.006	.003	.004	.006	.002	.001
TOTAL CATIONS	5.002	5.015	5.012	4.992	5.014	5.012	5.010	5.009
AN CONTENT	62.3	58.8	58.5	61.2	58.0	59.2	63.3	66.3

APPENDIX 5. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	615-2-1 10U	615-2-1 11U	615-2-1 12U	615-4-1 61541	615-4-1 1-1	615-4-1 1-2	615-4-1 2-1	615-4-1 2-2
SIO2	51.36	51.91	51.86	53.80	52.67	54.28	52.52	51.55
TIO2	.13	.04	.12	.08	.05	.10	.07	.08
AL2O3	29.42	28.19	29.41	30.27	31.35	29.69	30.43	31.36
FEO*	.28	.29	.21	.10	.14	.10	.12	.10
MNO	.00	.00	.00	.00	.00	.00	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.01
CAO	14.15	13.37	13.42	12.07	13.57	11.48	12.93	13.59
NA2O	3.61	4.15	4.03	4.76	4.08	5.20	4.46	3.81
K2O	.03	.04	.02	.10	.08	.05	.08	.09
TOTAL	99.19	97.98	99.07	101.17	101.13	100.82	100.11	100.52
NO. OF IONS/8 OXYGENS								
SI	2.360	2.410	2.375	2.406	2.339	2.432	2.377	2.331
TI	.004	.001	.004	.003	.002	.003	.002	.003
AL	1.595	1.542	1.594	1.595	1.640	1.568	1.624	1.668
FE	.010	.011	.008	.004	.005	.004	.005	.004
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.696	.665	.661	.578	.643	.547	.603	.656
NA	.339	.373	.359	.412	.356	.452	.391	.334
K	.002	.002	.001	.005	.004	.003	.004	.005
TOTAL CATIONS	5.004	5.006	5.004	5.003	5.009	5.008	5.006	5.002
AN CONTENT	67.2	63.9	64.7	58.1	64.1	54.6	60.4	66.0

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	615-4-1 2U	615-4-1 6U	615-4-1 9U	615-4-1 12U	615-4-1 13U	615-4-1 15U	615-5-1 1	615-5-1 2
SIO2	54.32	51.80	52.96	53.85	53.98	51.53	56.53	57.74
TIO2	.07	.07	.07	.08	.11	.06	.05	.03
AL2O3	28.45	29.66	29.23	29.20	28.29	30.80	27.99	27.55
FEO*	.18	.16	.10	.13	.14	.08	.02	.01
MNO	.00	.00	.00	.00	.00	.00	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	10.35	13.95	13.30	11.60	11.47	13.31	9.04	8.78
NA2O	5.31	4.14	4.61	5.31	5.50	4.50	6.08	6.50
K2O	.09	.04	.07	.06	.08	.03	.05	.03
TOTAL	100.98	99.72	100.34	100.23	99.67	100.31	99.77	100.64
NO. OF IONS/8 OXYGENS								
SI	2.429	2.365	2.399	2.431	2.453	2.338	2.537	2.567
TI	.002	.002	.002	.003	.004	.002	.002	.001
AL	1.535	1.597	1.562	1.554	1.516	1.648	1.481	1.443
FE	.007	.002	.004	.005	.005	.003	.001	.000
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.595	.683	.646	.561	.563	.647	.435	.416
NA	.463	.366	.405	.465	.485	.396	.529	.560
K	.005	.002	.004	.003	.005	.002	.003	.002
TOTAL CATIONS	5.035	5.018	5.022	5.023	5.030	5.035	4.987	4.992
AN CONTENT	56.	65.2	61.2	54.5	53.5	61.9	45.0	42.7

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	615-5-1 3	615-5-1 4U	615-5-1 8U	615-5-1 9U	616-6-1 1-2	616-6-1 1-3	616-6-1 2-1	616-6-1 2-2
SIO2	62.93	52.90	53.06	53.81	53.53	53.72	53.39	53.36
TIO2	.02	.08	.00	.02	.06	.02	.04	.06
AL203	24.18	28.23	27.79	27.64	29.83	29.25	29.94	29.92
FEO*	.09	.00	.07	.07	.04	.06	.02	.09
MNO	.00	.04	.02	.03	.01	.00	.00	.00
MGO	.00	.01	.00	.00	.00	.00	.00	.00
CAO	4.51	9.43	9.41	9.48	11.77	11.05	11.95	12.02
NA2O	8.52	7.52	7.12	7.02	4.65	4.85	4.59	4.85
K2O	.12	.04	.03	.01	.05	.05	.06	.06
TOTAL	100.34	98.25	97.99	98.08	99.96	99.00	99.99	100.35
NO. OF IONS/8 OXYGENS								
SI	2.769	2.442	2.472	2.480	2.418	2.445	2.412	2.406
TI	.001	.003	.000	.001	.002	.001	.001	.002
AL	1.253	1.536	1.512	1.502	1.588	1.568	1.594	1.590
FE	.003	.000	.003	.003	.002	.002	.001	.004
MN	.000	.002	.001	.001	.001	.000	.000	.000
MG	.000	.001	.000	.000	.000	.000	.000	.000
CA	.213	.466	.465	.468	.570	.539	.578	.581
NA	.727	.673	.637	.627	.408	.428	.402	.424
K	.007	.002	.002	.001	.003	.003	.003	.003
TOTAL CATIONS	4.971	5.125	5.092	5.082	4.991	4.986	4.992	5.010
AN CONTENT	22.5	40.8	42.1	42.7	58.1	55.6	58.8	57.6

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	616-6-1 3-1	616-6-1 3-2	616-6-1 3-3	616-7-2B 1-1	616-7-2B 1-3	616-7-2B 1-4	616-7-2B 2-1	616-7-2B 2-2
SIO2	55.67	56.72	52.19	54.95	53.52	54.62	52.70	52.66
TIO2	.02	.00	.05	.04	.04	.02	.04	.04
AL2O3	27.55	25.78	29.63	29.01	29.67	28.99	30.67	30.36
FEO*	.04	.03	.13	.15	.22	.21	.14	.16
MNO	.00	.00	.01	.01	.02	.01	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	7.57	7.67	11.96	10.78	11.56	10.76	12.72	12.22
NA2O	7.25	6.10	4.73	5.35	4.69	5.61	4.28	4.33
K2O	.08	.05	.04	.07	.08	.06	.06	.06
TOTAL	98.38	96.36	98.94	100.36	99.80	100.28	100.63	99.85
NO. OF IONS/8 OXYGENS								
SI	2.544	2.651	2.389	2.467	2.416	2.459	2.374	2.387
TI	.001	.000	.002	.001	.001	.001	.001	.001
AL	1.478	1.372	1.610	1.535	1.585	1.538	1.628	1.621
FE	.002	.001	.005	.006	.008	.008	.005	.006
MN	.000	.000	.000	.000	.001	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.369	.371	.587	.519	.561	.519	.614	.593
NA	.642	.534	.420	.466	.430	.490	.374	.386
K	.005	.003	.002	.004	.004	.003	.004	.004
TOTAL CATIONS	5.039	4.932	5.015	4.999	5.007	5.018	5.000	4.993
AN CONTENT	36.4	40.9	58.2	52.5	56.4	51.3	61.9	60.7

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	620-5-1 4A	620-5-1 6A	620-5-1 7A	620-5-1 10A	620-5-1 15A	620-5-1 16A	620-5-1 20A	621-3-1 1
SIO2	55.29	55.13	55.51	54.49	54.65	54.92	55.17	51.04
TIO2	.12	.02	.04	.11	.01	.00	.02	.03
AL2O3	27.62	27.10	27.24	27.43	28.22	27.71	27.38	31.71
FEO*	.12	.23	.17	.18	.18	.11	.19	.16
MNO	.00	.00	.00	.00	.00	.00	.00	.01
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	10.51	10.56	10.97	10.84	10.97	11.05	10.31	13.81
NA2O	5.99	5.81	5.73	5.55	5.80	5.52	5.66	3.70
K2O	.06	.05	.04	.05	.01	.05	.06	.06
TOTAL	99.70	98.92	99.70	98.65	99.84	99.36	98.99	100.54
NO. OF IONS/8 OXYGENS								
SI	2.501	2.514	2.513	2.493	2.473	2.494	2.512	2.310
TI	.004	.001	.001	.004	.000	.000	.001	.001
AL	1.474	1.457	1.454	1.480	1.506	1.484	1.470	1.692
FE	.005	.009	.006	.007	.007	.004	.007	.007
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.510	.517	.532	.531	.532	.538	.503	.670
NA	.525	.514	.503	.492	.509	.486	.517	.324
K	.003	.003	.002	.003	.001	.003	.003	.003
TOTAL CATIONS	5.022	5.015	5.012	5.011	5.028	5.009	5.013	5.007
AN CONTENT	49.1	50.0	51.3	51.8	51.1	52.4	49.2	67.2

APPENDIX 3a MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	621-3-1 2	621-3-1 3-1	621-3-1 3-2	621-3-1 3-3	621-3-2 1-1	621-3-2 1-2	621-3-2 1-3	621-3-2 2-1
SIO2	51.98	51.83	51.52	52.01	52.66	52.70	53.64	50.59
TIO2	.04	.05	.07	.04	.04	.04	.04	.05
AL2O3	31.48	32.23	31.28	31.09	29.90	30.08	29.55	31.38
FEO*	.19	.16	.11	.15	.14	.15	.14	.22
MNO	.00	.00	.00	.02	.01	.01	.00	.08
MGO	.00	.00	.00	.03	.00	.00	.00	.00
CAO	13.36	13.53	13.33	13.35	11.87	11.90	11.60	13.98
NA2O	3.63	3.16	3.62	3.91	4.65	4.68	4.92	3.11
K2O	.05	.05	.06	.06	.09	.10	.10	.05
TOTAL	100.92	100.01	100.18	100.66	99.49	99.66	100.00	99.45
NO. OF IONS/8 OXYGENS								
SI	2.336	2.313	2.334	2.346	2.401	2.394	2.425	2.313
TI	.001	.002	.002	.001	.001	.001	.001	.002
AL	1.669	1.711	1.671	1.652	1.602	1.610	1.575	1.691
FE	.007	.006	.004	.006	.005	.006	.005	.008
MN	.000	.000	.000	.001	.000	.000	.000	.003
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.644	.657	.647	.002	.578	.579	.562	.685
NA	.334	.278	.335	.645	.410	.412	.431	.276
K	.003	.003	.003	.342	.005	.006	.006	.003
TOTAL CATIONS	4.995	4.970	4.997	.004	5.004	5.009	5.005	4.981
AN CONTENT	65.6	70.0	65.7	.2	58.2	58.1	56.3	71.1

APPENDIX 3a. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	621-3-2 2-2	621-3-2 2-3	621-3-2 2-4	621-6-1 1-1	621-6-1 1-2	621-6-1 1-3	621-6-1 1-4	621-6-1 2-1
SIO2	50.68	50.42	50.31	49.22	48.87	49.67	47.22	60.22
TIO2	.06	.07	.06	.03	.04	.03	.04	.02
AL2O3	31.39	31.19	30.95	33.35	33.65	33.08	33.99	25.74
FEO*	.19	.15	.17	.16	.19	.22	.26	.07
MNO	.00	.01	.00	.01	.01	.02	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	13.77	13.47	13.69	15.81	16.13	15.39	16.74	6.67
NA2O	3.53	3.71	3.76	2.57	2.34	2.85	1.84	7.49
K2O	.08	.05	.06	.08	.07	.08	.05	.09
TOTAL	99.78	99.06	99.20	101.23	100.79	101.33	100.14	100.30
NO. OF IONS/8 OXYGENS								
SI	2.315	2.314	2.311	2.224	2.206	2.240	2.164	2.669
TI	.002	.002	.002	.001	.001	.001	.001	.001
AL	1.685	1.688	1.676	1.776	1.796	1.758	1.836	1.345
FE	.007	.006	.007	.006	.007	.009	.010	.003
MN	.000	.000	.000	.000	.000	.001	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.004
CA	.673	.662	.684	.765	.780	.744	.822	.317
NA	.312	.330	.335	.225	.206	******	.163	.644
K	.003	.003	.003	.004	.004	.004	.003	.005
TOTAL CATIONS	4.998	5.006	5.016	5.002	5.000	5.006	5.000	4.982
AN CONTENT	68.1	66.5	66.9	77.0	78.8	.3	83.2	32.8

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	621-6-1 2-2	621-6-1 2-3	621-6-1 2-4	622-1-1 1	622-1-1 2-1	622-1-1 2-2	622-1-1 2-3	622-1-1 3-1
SIO2	57.78	48.74	49.61	49.66	51.49	50.98	50.12	50.74
TIO2	.04	.08	.06	.02	.05	.04	.03	.04
AL2O3	26.71	33.07	32.51	32.59	31.42	31.49	32.09	31.78
FEO*	.18	.22	.25	.34	.27	.31	.24	.28
MNO	.01	.00	.01	.02	.00	.02	.02	.02
MGO	.00	.00	.00	.02	.01	.01	.02	.01
CAO	8.48	15.46	15.10	15.01	13.52	13.87	14.61	14.36
NA2O	6.21	2.69	2.99	2.96	3.72	3.61	3.23	3.42
K2O	.16	.09	.08	.04	.06	.06	.05	.05
TOTAL	99.49	100.35	100.61	100.56	100.34	100.39	100.41	100.70
NO. OF IONS/8 OXYGENS								
SI	2.593	2.222	2.253	2.255	2.332	2.312	2.277	2.297
TI	.001	.003	.002	.001	.002	.001	.001	.001
AL	1.415	1.777	1.740	1.744	1.667	1.683	1.718	1.696
FE	.007	.008	.009	.013	.010	.012	.009	.010
MN	.000	.000	.001	.001	.000	.001	.001	.001
MG	.002	.000	.000	.001	.001	.001	.002	.000
CA	.408	.755	.735	.730	.656	.674	.711	.697
NA	.541	******	.263	.252	.326	.318	.284	.300
K	.009	.005	.005	.002	.003	.004	.003	.003
TOTAL CATIONS	4.974	5.009	5.008	4.999	4.998	5.005	5.006	5.005
AN CONTENT	42.6	.3	73.3	74.2	66.6	67.7	71.2	69.7

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	622-1-1 3-2	622-1-1 3-3	737-1 1-1	737-1-1 1-2	737-1-1 1-3	737-1-1 1-4	737-1-1 1-5	737-1-1 1-6
SIO2	52.66	51.15	58.09	57.89	57.50	57.78	57.94	57.44
TIO2	.05	.05	.05	.01	.03	.03	.02	.02
AL2O3	31.61	31.57	27.16	27.03	27.12	27.09	27.26	27.34
FEO*	.25	.25	.15	.20	.09	.09	.07	.04
MNO	.00	.01	.01	.02	.01	.01	.01	.00
MGO	.01	.02	.00	.00	.01	.00	.00	.00
CAO	14.36	14.20	8.11	8.17	8.00	8.46	8.43	8.62
NA2O	3.29	3.57	6.77	5.85	8.34	6.82	6.84	6.66
K2O	.06	.05	.05	.07	6.02	.06	.04	.05
TOTAL	100.41	100.67	100.29	99.24	.05	100.33	100.60	100.21
NO. OF IONS/8 OXYGENS								
SI	2.298	2.313	2.589	2.598	2.575	2.578	2.577	2.568
TI	.002	.002	.002	.000	.001	.001	.001	.001
AL	1.700	1.683	1.421	1.430	1.431	1.425	1.429	1.439
FE	.009	.010	.006	.007	.003	.003	.003	.002
MN	.000	.000	.001	.001	.000	.000	.000	.000
MG	.001	.001	.000	.000	.000	.000	.000	.000
CA	.695	.678	.387	.393	.400	.405	.402	.413
NA	.269	.313	.585	.509	.592	.590	.589	.576
K	.003	.003	.003	.004	.003	.003	.002	.003
TOTAL CATIONS	4.997	5.002	4.993	4.943	5.006	5.005	5.004	5.001
AN CONTENT	70.4	68.2	39.7	43.4	40.2	40.6	40.5	41.6

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	737-1-2 1-1	737-1-2 1-2	737-1-2 1-3	737-1-2 1-4	737-1-2 2-1	737-1-2 2-2	737-1-2 2-3	739-1-1 1-1
SIO2	56.69	56.42	56.35	56.68	56.31	55.93	55.98	49.82
TIO2	.06	.05	.04	.05	.05	.05	.06	.03
AL2O3	27.65	27.80	27.70	27.81	27.34	27.60	27.48	31.84
FEO*	.15	.17	.11	.10	.15	.13	.13	.24
MNO	.00	.01	.02	.02	.01	.01	.00	.02
MGO	.00	.00	.00	.00	.00	.00	.00	.02
CAO	9.13	9.20	9.21	9.18	9.17	9.21	9.13	14.43
NA2O	5.96	5.99	6.31	5.96	6.23	6.18	5.78	3.25
K2O	.15	.14	.11	.06	.07	.11	.13	.08
TOTAL	99.62	99.77	99.84	99.85	99.53	99.22	98.69	99.74
NO. OF IONS/8 OXYGENS								
SI	2.546	2.536	2.534	2.543	2.544	2.531	2.542	2.279
TI	.002	.002	.001	.002	.002	.002	.002	.001
AL	1.463	1.473	1.468	1.470	1.456	1.472	1.470	1.717
FE	.007	.006	.004	.004	.006	.005	.005	.009
MN	.000	.000	.001	.001	.000	.000	.000	.001
MG	.000	.000	.000	.000	.000	.000	.000	.001
CA	.439	.443	.444	.441	.444	.447	.444	.707
NA	.519	.522	.550	.518	.546	.542	.509	.288
K	.009	.008	.006	.004	.004	.006	.008	.005
TOTAL CATIONS	4.984	4.991	5.008	4.982	5.002	5.005	4.980	5.008
AN CONTENT	45.4	45.5	44.4	45.8	44.7	44.9	46.2	70.7

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	739-1-1 1-2	739-1-1 1-3	739-1-1 1-4	739-1-1 2-1	739-1-1 2-2	739-1-1 2-3	739-1-1 2-4	739-2-2 1-1
SIO2	49.72	50.17	49.64	50.51	48.95	49.67	49.51	48.66
TIO2	.06	.04	.09	.07	.05	.06	.06	.03
AL2O3	32.17	31.92	32.18	31.28	31.76	31.50	31.90	33.06
FEO*	.13	.13	.18	.18	.21	.21	.17	.14
MNO	.03	.01	.01	.01	.01	.01	.00	.02
MGO	.01	.02	.02	.03	.02	.02	.01	.01
CAO	14.45	14.49	14.37	14.25	14.60	14.56	14.66	16.02
NA2O	3.04	3.30	3.36	3.43	3.18	3.29	3.15	2.67
K2O	.07	.07	.09	.07	.08	.07	.08	.05
TOTAL	99.74	100.16	100.13	99.63	98.87	99.39	99.55	100.67
NO. OF IONS/8 OXYGENS								
SI	2.274	2.284	2.271	2.308	2.262	2.282	2.270	2.216
TI	.002	.001	.003	.002	.002	.002	.002	.001
AL	1.732	1.713	1.728	1.685	1.730	1.705	1.724	1.773
FE	.005	.005	.007	.007	.008	.008	.007	.005
MN	.001	.000	.000	.000	.000	.000	.000	.001
MG	.001	.001	.001	.002	.002	.001	.001	.001
CA	.707	.707	.701	.688	.723	.717	.720	.781
NA	.269	.291	.296	.304	.285	.293	.280	.236
K	.004	.004	.005	.004	.005	.004	.005	.003
TOTAL CATIONS	4.995	5.007	5.013	5.001	5.016	5.012	5.009	5.016
AN CONTENT	72.1	70.6	70.0	69.1	71.4	70.7	71.6	76.6

APPENDIX 3a. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	739-2-2 1-2	739-2-2 1-3	739-2-2 1-4	739-2-2 2-1	739-2-2 2-2	739-2-2 2-3	739-2-2 2-4	739-3-1 1-1
SIO2	50.12	49.73	49.65	46.20	49.52	48.34	49.74	52.35
TIO2	.06	.05	.05	.01	.06	.06	.10	.09
AL2O3	31.99	32.46	32.06	34.64	32.37	33.49	32.49	31.22
FeO*	.19	.17	.13	.14	.14	.15	.16	.20
MNO	.00	.02	.02	.01	.01	.02	.01	.00
MGO	.04	.01	.01	.11	.01	.00	.02	.01
CAO	14.25	15.06	14.61	16.82	14.65	16.09	14.68	12.81
NA2O	3.41	2.85	3.10	1.90	2.10	2.98	3.02	4.14
K2O	.06	.06	.07	.04	.06	.06	.06	.08
TOTAL	100.13	100.41	99.88	99.77	99.60	101.23	100.47	100.91
NO. OF IONS/8 OXYGENS								
SI	2.262	2.260	2.268	2.128	2.248	2.195	2.259	2.353
TI	.002	.002	.002	.000	.002	.002	.003	.003
AL	1.717	1.739	1.727	1.881	1.749	1.791	1.739	1.654
FE	.007	.006	.005	.005	.005	.006	.006	.008
MN	.000	.001	.001	.000	.000	.001	.000	.000
MG	.002	.001	.001	.001	.000	.000	.001	.001
CA	.695	.733	.715	.830	.734	.782	.724	.617
NA	.301	.251	.274	.170	.267	.262	.266	.361
K	.003	.003	.004	.002	.004	.003	.003	.004
TOTAL CATIONS	5.011	4.996	5.006	5.017	5.010	5.040	5.003	5.006
AN CONTENT	69.6	74.3	72.3	82.8	73.0	74.7	72.9	62.8

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	739-3-1 1-2	739-3-1 1-3	739-3-1 1-4	739-3-1 2-1	739-3-1 2-2	739-3-1 2-3	739-3-1 2-4	739-4-2 1-1
SIO2	52.22	49.75	52.71	52.22	50.58	49.89	50.46	58.46
TIO2	.05	.02	.03	.04	.04	.08	.05	.04
AL2O3	30.46	33.17	30.42	30.75	32.69	32.05	31.74	26.19
FEO*	.15	.15	.16	.14	.18	.18	.20	.20
MNO	.02	.00	.05	.00	.00	.01	.02	.00
MGO	.00	.00	.00	.00	.01	.01	.06	.01
CAO	12.34	15.27	12.19	12.88	14.48	13.79	14.19	7.51
NA2O	4.42	2.71	4.11	4.01	3.15	3.61	3.43	6.94
K2O	.06	.03	.07	.07	.07	.07	.06	.20
TOTAL	99.90	100.10	99.94	100.11	100.10	99.69	100.22	99.53
NO. OF IONS/8 OXYGENS								
SI	2.378	2.225	2.393	2.384	2.280	2.280	2.294	2.622
TI	.002	.001	.001	.001	.002	.003	.002	.001
AL	1.630	1.784	1.621	1.641	1.742	1.726	1.701	1.384
FE	.006	.006	.006	.005	.007	.007	.008	.007
MN	.001	.000	.002	.000	.000	.000	.001	.000
MG	.002	.000	.000	.000	.001	.001	.004	.000
CA	.613	.747	.591	.625	.706	.675	.691	.361
NA	.389	.239	.360	.352	.278	.319	.303	.604
K	.004	.002	.004	.004	.004	.004	.004	.012
TOTAL CATIONS	5.015	5.003	4.978	4.992	4.999	5.016	5.007	4.992
AN CONTENT	61.8	75.6	61.9	63.7	71.5	67.6	69.2	36.9

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	739-4-2 1-2	739-4-2 1-3	739-4-2 2-1	739-4-2 2-2	739-4-2 2-3	739-6-1 2-1	739-6-1 2-2	739-6-1 2-3
SIO2	55.63	56.25	56.95	56.25	56.36	51.79	51.41	52.47
TIO2	.03	.00	.02	.00	.02	.00	.02	.01
AL2O3	26.39	25.79	25.92	26.18	26.16	30.82	30.78	30.65
FEO*	.21	.15	.17	.14	.13	.10	.11	.09
MNO	.00	.00	.01	.02	.00	.01	.00	.01
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	7.83	6.84	7.46	7.65	7.78	12.97	13.21	10.52
NA2O	7.02	7.26	7.05	7.04	6.95	4.05	3.91	5.42
K2O	.24	.24	.24	.21	.25	.08	.10	.06
TOTAL	100.34	99.64	99.81	99.49	99.30	99.81	99.53	99.25
NO. OF IONS/8 OXYGENS								
SI	2.623	2.650	2.636	2.617	2.614	2.354	2.345	2.388
TI	.001	.000	.001	.000	.001	.000	.001	.000
AL	1.365	1.360	1.366	1.386	1.366	1.651	1.655	1.644
FE	.008	.006	.006	.005	.005	.004	.004	.003
MN	.000	.000	.000	.001	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.364	.333	.357	.368	.375	.632	.646	.513
NA	.642	.630	.611	.613	.606	.357	.346	.478
K	.013	.014	.014	.012	.014	.005	.006	.005
TOTAL CATIONS	4.997	4.992	4.992	5.002	5.002	5.002	5.002	5.031
AN CONTENT	37.1	34.1	36.4	37.1	37.7	63.6	64.7	51.5

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	739-6-1 3-1	739-6-1 3-2	739-6-1 3-3	739-6-1 4-1	739-6-1 4-2	740-7-1 1-1	740-7-1 1-2	740-7-1 1-3
SIO2	52.45	51.70	51.31	58.21	58.58	52.75	53.18	52.68
TIO2	.02	.00	.00	.00	.01	.06	.08	.08
AL2O3	30.41	31.00	31.29	26.81	26.67	29.98	30.12	30.07
FEO*	.19	.20	.21	.08	.07	.25	.13	.17
MNO	.01	.00	.00	.00	.01	.01	.01	.01
MGO	.01	.01	.00	.01	.00	.00	.00	.00
CAO	13.14	13.36	13.10	7.87	8.11	11.85	12.00	12.03
NA2O	4.05	3.86	3.93	6.82	7.23	4.56	4.44	4.45
K2O	.09	.05	.05	.18	.19	.10	.12	.12
TOTAL	100.38	100.20	99.88	99.98	100.86	99.56	100.09	99.60
NO. OF IONS/8 OXYGENS								
SI	2.354	2.343	2.332	2.601	2.601	2.398	2.403	2.394
TI	.001	.000	.000	.000	.000	.002	.003	.003
AL	1.647	1.656	1.676	1.412	1.395	1.606	1.603	1.610
FE	.007	.008	.008	.003	.002	.010	.005	.007
MN	.000	.000	.000	.000	.000	.001	.000	.000
MG	.001	.001	.000	.000	.000	.000	.000	.000
CA	.632	.649	.638	.377	.386	.577	.581	.586
NA	.355	.339	.347	.591	.622	.401	.389	.392
K	.005	.003	.003	.010	.011	.006	.007	.007
TOTAL CATIONS	5.002	5.000	5.004	4.994	5.018	5.001	4.991	4.998
AN CONTENT	63.7	65.5	64.6	38.5	37.9	58.6	59.5	59.5

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	740-7-1 2-1	740-7-1 2-3	740-7-1 2-4	741-1-1 1-1	741-1-1 1-2	741-1-1 1-3	741-1-1 1-4	741-1-1 1-5
SIO2	62.66	67.41	64.63	54.37	54.49	53.93	53.73	53.09
TIO2	.00	.00	.00	.00	.02	.03	.03	.05
AL2O3	23.83	20.56	22.32	29.66	29.26	29.68	29.91	29.97
FEO*	.06	.05	.04	.10	.14	.12	.11	.14
MNO	.00	.01	.00	.01	.01	.00	.00	.01
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	3.68	1.11	2.71	11.47	11.39	11.32	11.72	11.83
NA2O	9.53	9.30	10.29	4.68	5.05	4.97	4.81	4.69
K2O	.05	.08	.09	.12	.16	.16	.12	.14
TOTAL	100.17	98.51	100.08	100.60	100.51	100.21	100.42	99.88
NO. OF IONS/8 OXYGENS								
SI	2.774	2.972	2.846	2.439	2.448	2.430	2.418	2.405
TI	.000	.000	.000	.000	.001	.001	.001	.002
AL	1.239	1.068	1.158	1.568	1.549	1.576	1.586	1.600
FE	.002	.002	.002	.004	.005	.004	.004	.005
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.163	.053	.128	.551	.548	.547	.565	.572
NA	.813	.795	.878	.424	.440	.434	.420	.412
K	.003	.004	.005	.007	.009	.009	.007	.006
TOTAL CATIONS	5.014	4.894	5.017	4.993	5.001	5.003	5.001	5.004
AN CONTENT	16.3	6.2	12.7	56.1	55.0	55.3	57.0	57.7

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	741-2-1 1-1	741-2-1 1-2	741-2-1 1-3	741-2-1 2-2	741-2-1 2-3	741-2-1 2-4	741-3-1 1-1	741-3-1 1-2
SIO2	62.38	62.24	62.11	54.74	62.91	63.02	52.24	53.22
TIO2	.00	.00	.01	.02	.00	.01	.07	.05
AL2O3	23.66	24.44	23.60	29.03	23.62	23.57	30.61	30.18
FEO*	.15	.14	.17	.10	.16	.13	.20	.16
MNO	.02	.00	.00	.01	.00	.02	.00	.00
MGO	.03	.00	.00	.00	.00	.00	.02	.00
CAO	4.67	5.15	4.89	10.83	5.04	4.47	12.42	11.98
NA2O	8.59	8.01	7.84	5.11	8.25	8.49	4.36	4.68
K2O	.43	.42	.46	.16	.38	.34	.15	.09
TOTAL	99.79	100.40	98.77	100.00	100.35	100.05	100.06	100.36
NO. OF IONS/8 OXYGENS								
SI	2.773	2.746	2.779	2.466	2.775	2.784	2.368	2.400
TI	.000	.000	.000	.001	.000	.000	.002	.002
AL	1.239	1.270	1.239	1.541	1.228	1.227	1.635	1.604
FE	.006	.005	.006	.004	.006	.005	.008	.006
MN	.001	.000	.000	.000	.000	.001	.000	.000
MG	.000	.000	.000	.000	.000	.000	.001	.000
CA	.222	.244	.225	.523	.239	.212	.603	.579
NA	.739	.685	.680	.446	.705	.727	.383	.409
K	.024	.023	.026	.009	.021	.019	.008	.005
TOTAL CATIONS	4.995	4.977	4.955	4.990	4.974	4.975	5.009	5.004
AN CONTENT	22.9	25.6	24.2	53.5	24.7	22.1	60.7	56.3

APPENDIX 3a. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	741-3-1 1-3	741-3-1 1-4	741-3-1 2-1	741-3-1 2-2	741-3-1 2-3	741-3-1 2-4	743-2-1 1-1	742-2-4 1-2
SIO2	52.62	53.53	52.23	56.28	52.77	52.35	59.16	54.36
TIO2	.04	.02	.03	.10	.03	.05	.00	.00
AL2O3	30.55	29.95	31.15	25.99	30.08	30.46	26.17	29.21
FeO*	.14	.13	.20	.12	.20	.20	.18	.13
MNO	.01	.01	.01	.00	.00	.00	.00	.00
MgO	.00	.00	.00	.00	.01	.01	.00	.00
CAO	12.30	11.66	12.66	9.08	12.30	12.30	7.32	11.10
NA2O	4.65	4.89	4.42	5.87	5.36	4.48	7.51	5.21
K2O	.05	.06	.12	.18	.14	.12	.11	.20
TOTAL	100.24	100.25	100.02	99.63	100.89	99.96	100.32	100.21
NO. OF IONS/8 OXYGENS								
SI	2.378	2.414	2.372	2.615	2.380	2.374	2.629	2.450
TI	.001	.001	.001	.003	.001	.002	.000	.000
AL	1.627	1.592	1.614	1.375	1.599	1.628	1.373	1.551
FE	.005	.005	.008	.005	.007	.007	.007	.005
MN	.000	.000	.000	.000	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.001	.000	.000
CA	.595	.563	.626	.436	.594	.598	.348	.536
NA	.399	.428	.390	.511	.468	.394	.649	.455
K	.003	.003	.007	.010	.008	.007	.006	.012
TOTAL CATIONS	5.008	5.005	5.011	4.955	5.058	5.010	5.011	5.009
AN CONTENT	59.7	56.6	61.2	45.6	55.5	59.9	34.7	53.4

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSES	742-2-1 1-3	742-2-1 1-4	742-2-1 1-5	742-3-1 1-1	742-3-1 1-2	742-3-1 1-3	742-3-1 1-4	742-3-1 1-5
SIO2	60.68	60.28	53.17	51.72	51.76	59.37	58.16	51.87
TIO2	.00	.00	.01	.04	.04	.01	.02	.04
AL2O3	24.84	24.43	29.19	31.36	31.46	26.35	26.83	30.86
FEO*	.18	.16	.16	.09	.08	.03	.08	.09
MNO	.00	.01	.00	.02	.00	.00	.00	.00
MGO	.00	.00	.00	.00	.00	.00	.00	.00
CAO	6.14	6.45	10.99	13.02	13.20	7.99	7.73	13.23
NA2O	7.60	6.15	5.08	3.88	3.69	7.20	6.99	4.07
K2O	.34	.14	.16	.08	.09	.05	.04	.09
TOTAL	99.98	100.71	99.39	100.20	100.52	100.99	99.75	100.24
NO. OF IONS/8 OXYGENS								
SI	2.706	2.680	2.442	2.340	2.336	2.625	2.599	2.350
TI	.000	.000	.000	.001	.001	.000	.001	.001
AL	1.381	1.278	1.563	1.673	1.673	1.373	1.415	1.647
FE	.007	.006	.006	.003	.003	.001	.003	.003
MN	.000	.000	.000	.001	.000	.000	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.292	.449	.535	.631	.638	.379	.371	.642
NA	.656	.529	.447	.340	.341	.617	.606	.357
K	.019	.008	.010	.005	.005	.003	.003	.005
TOTAL CATIONS	4.962	4.950	5.004	4.995	4.998	4.998	4.997	5.006
AN CONTENT	31.2	45.5	53.9	64.7	64.8	37.9	37.9	63.9

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

ANALYSIS	742-3-1 1-6	742-5-2 1-1	742-5-2 1-2	742-5-2 1-3	742-5-2 1-4	742-5-2 1-5	742-5-2 1-6	742-5-2 2-1
SIO2	51.48	57.94	53.05	54.67	52.51	52.92	54.83	52.31
TIO2	.05	.01	.02	.00	.04	.04	.00	.05
AL2O3	31.26	27.37	27.21	29.39	30.51	30.59	27.71	30.93
FEO*	.09	.08	.05	.07	.17	.14	.06	.14
MNO	.00	.02	.02	.00	.01	.02	.00	.05
MGO	.00	.00	.00	.00	.02	.00	.00	.00
CAO	12.99	8.27	8.20	11.58	12.65	12.45	10.71	12.61
NA2O	4.29	6.57	6.65	5.56	4.32	4.37	5.73	4.26
K2O	.09	.06	.06	.16	.08	.08	.07	.08
TOTAL	100.23	100.13	100.15	101.44	100.30	100.51	99.11	100.38
NO. OF IONS/8 OXYGENS								
SI	2.334	2.583	2.588	2.440	2.374	2.380	2.496	2.362
TI	.002	.000	.001	.000	.001	.001	.000	.002
AL	1.673	1.438	1.430	1.546	1.625	1.625	1.487	1.646
FE	.003	.003	.002	.003	.006	.005	.002	.005
MN	.000	.001	.001	.000	.000	.001	.000	.000
MG	.000	.000	.000	.000	.000	.000	.000	.000
CA	.631	.386	.391	.554	.613	.601	.522	.610
NA	.376	.568	.566	.481	.379	.382	.506	.373
K	.005	.004	.004	.009	.005	.005	.004	.005
TOTAL CATIONS	5.025	4.983	4.981	5.032	5.004	5.000	5.016	5.002
AN CONTENT	62.4	40.3	40.7	53.1	61.5	60.8	50.6	61.7

APPENDIX 3. MICROPROBE ANALYSES OF PLAGIOCLASE IN CAYMAN TROUGH PLUTONICS

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ANALYSIS	742-5-2 2-2	742-5-2 2-3	742-5-2 2-4
SIO2	53.21	60.35	59.63
TIO2	.05	.01	.02
AL2O3	30.12	25.04	25.60
FEO*	.14	.11	.12
MNO	.03	.00	.00
MGO	.01	.00	.00
CAO	12.25	5.32	7.12
NA2O	4.43	7.80	7.13
K2O	.06	.09	.05
TOTAL	99.43	99.23	99.16
NO. OF IONS/8 OXYGENS			
SI	2.383	2.713	2.682
TI	.001	.000	.001
AL	1.622	1.316	1.321
FE	.005	.004	.005
MN	.001	.000	.000
MG	.000	.000	.000
CA	.603	.254	.342
NA	.391	.679	.611
K	.003	.005	.003
TOTAL CATIONS	5.007	4.966	4.964
AN CONTENT	60.4	27.2	35.8