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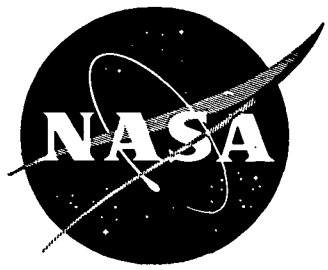

MICROPROBE ANALYSES OF GLASSES AND MINERALS FROM LUNA-16 SOIL

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

MANNED SPACECRAFT CENTER

HOUSTON, TEXAS 77058

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ABSTRACT

Electron microprobe analyses are presented for nine elements in 250 glasses and 434 pyroxenes, eight elements in 113 olivines, and six elements in 354 feldspars, 35 spinels, and 159 ilmenites. All grains are from the 125-425 micron fraction of horizon A and horizon D soil from the Luna 16 sample. The glasses are classified according to criteria discussed by Jakeš et al., 1971. A norm is presented for each glass analysis and the structural formula is calculated for each mineral analysis.

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INTRODUCTION

Electron microprobe analyses are presented of phases found in material returned by the Soviet Luna 16 mission. Samples are from the 125 to 425 micron fraction of a 28 mg. sample of horizon A -- the surface layer, and from a 25 mg. sample of horizon D -- 30 cm. in depth. Analyses (with accompanying norms or structural formulae) are presented for glasses, pyroxenes, feldspars, olivines, and oxide minerals. Methods used are essentially those described by the Apollo Soil Survey (1971a, b).

The column headings in Tables 1-8 and 11-14 are a ten character code:

L N LN LL NNN L

where N is a digit and L is a letter. From the left the symbols mean:

1. L - horizon of the sample: A - layer A; G - layer D
2. N - size split: 1 - 250 - 400 microns; 2 - 149 - 250 microns; 3 - 125 - 149 microns. Analyses from the 125 - 149 micron fraction (3) constitute the random survey.
3. LN - Number of polished thin section that contains the grain.
4. LL - petrographic code for the analysis. The first character defines the nature of the host and the second character defines the phase analyzed. The petrographic codes are:
   - A - agglutinate or breccia fragment
   - C - cryptocrystalline lithic fragment
   - F - feldspar
   - G - glass
   - L - igneous textured lithic fragment
   - O - olivine
   - P - pyroxene
   - X - oxide mineral
5. NNN - grain number

6. L - sequential letter (A,B,C,...) of analyses from different parts of a grain.

The column headings in Tables 9 and 10 are the following ten character code:

L N LN LL L N NN

Fields 1, 2, 3, and 4 are as described above. The remaining three fields mean:

5. L - igneous fragment letter
6. N - traverse or crystal number
7. NN - analysis number within a given traverse

Analyses and norms of glasses are found in Tables 1 through 5 in order of increasing FeO content. Each table contains the analyses of those fragments belonging to one of the glass groups described by Jakeš et al. (1971). The glasses are classified as follows:

1. Fecunditatis Basaltic Glass Type A
   Al_2O_3 less than 23*, TiO_2 less than 5.
2. Fecunditatis Basaltic Glass Type B
   Al_2O_3 less than 23, TiO_2 greater than 5.
3. Highland Basaltic Glass
   Al_2O_3 greater than 23, less than 30.
4. Highland Anorthositic Glass
   Al_2O_3 greater than 30.
5. Potassic Granite
   SiO_2 greater than 60.

Analyses and structural formulae of pyroxenes are found in Tables 6 through 10. Tables 6, 7, and 8 list pyroxenes in order of increasing FeO content for low, medium, and high CaO pyroxenes respectively. Tables 9 and 10 list pyroxene analyses from traverses within igneous fragments starting in the core of each pyroxene crystal.

Plagioclase, olivine, and oxide mineral analyses and structural formulae are listed in Tables 11 through 14. Table 11 contains plagioclase analyses in order of increasing CaO content. Table 12 lists olivine analyses in order of increasing FeO content. Spinel and ilmenite analyses are found in Tables 13 and 14 respectively in order of increasing TiO_2 content.

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* Numbers in weight percent.

The analyses presented herein have not been published previously save for 18 mineral analyses that appeared in Jakes et al. (1971). The data have been plotted in diagrams, and average analyses have been published, together with interpretations, in various papers by us (Jakes et al., 1971 and Reid et al., 1971).

Electron probe analyses were made in the Geochemistry Branch laboratories at the Manned Spacecraft Center. Matrix corrections follow the method of Mason, Frost, and Reed (1969). The precision for major elements is $\pm$ 3 percent of the amount present. Minor element determinations are less precise; backgrounds were not measured on each grain and errors may range up to 0.2 weight percent. In most cases the printed total was arrived at by adding the constituent oxides before rounding off to two decimal places.

We thank Phyllis Richardson, Bob Bilderback, Conne Bender, Carol Hardy, and Liz Alley for help in data reduction and manuscript preperation.

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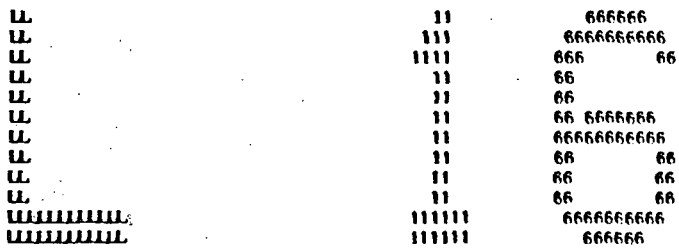

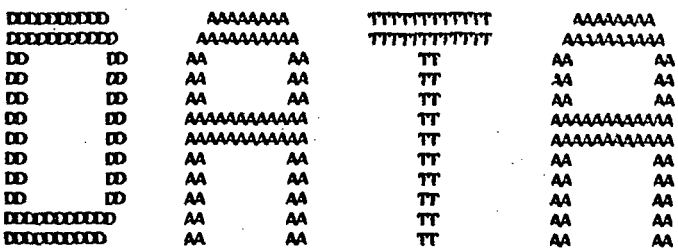

LIST OF TABLES

TABLE 1. GLASS ANALYSES - I. FECUNDITATIS TYPE A

	G3A3CG028A	A3A4CC106A	G3A1AG113A	G2A3AG059A	G2A3AG027A	G2A1AG077A
SIO2	48.23	48.05	45.76	50.75	46.48	43.87
TIO2	1.17	1.03	.93	.92	.42	1.32
AL2O3	20.49	21.34	21.57	20.54	21.96	21.96
CR2O3	.61	.14	.23	.19	.33	.06
FEO	6.25	6.33	6.54	6.74	7.76	7.88
MGO	6.73	7.56	6.81	5.40	9.51	11.12
CAO	12.96	13.71	13.78	14.80	13.42	12.95
NA2O	.89	.33	.32	.63	.45	.48
K2O	.12	.22	.07	.09	.44	.00
TOTAL	97.46	98.72	96.01	100.05	100.76	99.64
QTZ	3.430	2.750	1.680	6.530	-	-
OR	.710	1.300	.410	.530	2.600	-
AB	7.530	2.790	2.710	5.330	3.810	4.060
AN	51.560	56.100	57.220	52.950	56.600	57.770
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	5.320	4.980	4.660	8.550	4.170	2.710
EN	16.760	18.830	16.960	13.450	12.800	9.130
FS	9.020	9.800	10.270	10.690	7.170	4.040
FO	-	-	-	-	7.620	13.010
FA	-	-	-	-	4.710	6.330
ILM	2.220	1.960	1.770	1.750	.800	2.510
CHR	.900	.210	.340	.280	.490	.090
COR	-	-	-	-	-	-

	G3A1CC100A	A3A5CC097A	A3A4CC121A	A3A4GG149A	A3A4AG067A	G3A1AG069A
SIO2	49.17	45.91	46.81	46.34	46.40	46.12
TIO2	.52	.81	.65	.63	2.77	.52
AL2O3	18.76	20.36	20.98	18.95	21.47	20.05
CR2O3	.20	.18	.20	.15	.11	.21
FEO	8.96	9.16	9.18	9.37	9.86	9.97
MGO	15.42	9.77	8.34	9.43	5.27	8.55
CAO	9.22	12.67	13.33	12.72	12.41	12.98
NA2O	.47	.38	.48	.56	.27	.21
K2O	.00	.11	.10	.10	.21	.07
TOTAL	102.71	99.34	100.06	98.25	98.78	98.66
QTZ	-	-	-	-	4.500	-
OR	-	.650	.590	.590	1.240	.410
AB	3.980	3.220	4.060	4.740	2.280	1.780
AN	45.740	53.530	54.800	48.900	56.750	53.560
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	-	3.900	4.730	5.930	2.010	4.520
EN	29.890	16.650	16.470	17.220	13.120	18.290
FS	12.000	10.490	12.380	11.760	13.440	14.830
FO	5.970	5.380	3.010	4.390	-	2.100
FA	2.640	3.740	2.500	3.300	-	1.880
ILM	.990	1.540	1.230	1.200	5.260	.990
CHR	.290	.270	.290	.220	.160	.310
COR	1.220	-	-	-	-	-

TABLE 1. - CONTINUED

	A3A5AG208A	G3A2GG097A	G3A3GG051A	G1H0AG006A	G2A3GG097A	G2A3AG072A
SIO2	43.94	45.94	52.57	44.72	47.36	46.42
TIO2	1.65	.42	2.52	1.40	.70	1.57
AL2O3	22.18	22.95	15.68	21.21	20.20	19.19
CR2O3	.26	.17	.15	.18	.23	.23
FEO	10.23	10.27	10.31	10.35	10.46	10.47
MGO	5.43	6.92	7.46	8.26	9.50	8.85
CAO	13.63	13.63	10.42	14.26	12.95	13.00
NA2O	.27	.27	.36	.47	.31	.41
K2O	.07	.06	.13	.16	.12	.12
TOTAL	97.65	100.64	99.61	101.02	101.83	100.26
QTZ	-	-	12.220	-	-	-
OR	.410	.350	.770	.950	.710	.710
AB	2.280	2.280	3.050	3.980	2.620	3.470
AN	59.100	61.230	40.790	55.290	53.370	50.170
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	3.560	2.670	4.550	6.450	4.540	5.980
EN	12.510	13.120	18.580	8.770	18.150	18.070
FS	14.650	13.720	14.640	7.050	13.700	13.470
FO	.710	2.880	-	8.270	3.860	2.780
FA	.920	3.320	-	7.330	3.210	2.290
ILM	3.130	.800	4.790	2.660	1.330	2.980
CHR	.380	.250	.220	.270	.340	.340
COR	-	-	-	-	-	-

	G2A1AG046A	G3A3AG018A	A3A4AG133A	A3A1GG125A	A3A5AG122A	G2A1CC036B
SIO2	45.85	45.15	47.39	45.49	44.94	45.23
TIO2	1.24	1.69	.78	.79	1.36	.60
AL2O3	20.40	19.47	19.46	21.49	17.11	19.89
CR2O3	.18	.15	.23	.17	.24	.17
FEO	10.53	10.66	10.67	10.67	10.75	10.76
MGO	8.47	7.82	11.12	8.76	8.88	9.81
CAO	13.20	12.82	11.92	13.01	12.07	12.83
NA2O	.34	.33	.49	.36	.19	.30
K2O	.08	.04	.10	.13	.16	.11
TOTAL	100.30	98.13	102.15	100.80	95.69	99.71
QTZ	-	-	-	-	-	-
OR	.470	.240	.590	.770	.950	.650
AB	2.880	2.790	4.150	3.050	1.610	2.540
AN	53.900	51.530	50.610	56.640	45.360	52.600
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	4.840	5.040	3.560	3.300	6.060	4.610
EN	15.630	17.390	17.950	12.420	20.830	13.550
FS	12.690	14.870	11.740	10.320	16.280	10.330
FO	3.830	1.460	6.820	6.590	.900	7.630
FA	3.430	1.370	4.920	6.040	.780	6.410
ILM	2.360	3.210	1.480	1.500	2.580	1.140
CHR	.270	.220	.340	.250	.350	.250
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	A3A1AG082B	A3A2AG051A	A3A5AG131A	A1B1GG002A	G1H0AG021A	G3A2GG259A
SIO2	46.88	52.61	46.16	52.80	44.63	46.81
TIO2	.73	.69	.46	.77	2.82	1.87
AL203	18.78	15.65	20.97	15.16	18.25	18.46
CR203	.18	.18	.20	.18	.17	.15
FEO	10.85	10.88	10.90	11.04	11.04	11.10
MGO	10.49	8.16	8.93	8.13	8.52	7.55
CAO	12.61	10.26	12.11	11.00	14.03	13.13
NA2O	.24	.68	.42	.63	.36	.58
K2O	.12	.06	.07	.09	.10	.13
TOTAL	100.88	99.17	100.23	99.79	99.92	99.76
QTZ	-	8.240	-	8.040	-	-
OR	.710	.350	.410	.530	.590	.770
AB	2.030	5.750	3.550	5.330	3.050	4.910
AN	49.810	39.470	55.130	38.270	47.890	47.380
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	5.320	4.770	2.070	6.810	9.070	7.410
EN	18.890	20.320	15.300	20.250	14.840	17.950
FS	13.430	18.680	13.130	18.850	10.820	16.380
FO	5.070	-	4.860	-	4.470	.600
FA	3.970	-	4.600	-	3.590	.600
ILM	1.390	1.310	.870	1.460	5.360	3.550
CHR	.270	.270	.290	.270	.250	.220
COR	-	-	-	-	-	-

	G1H0AC029A	A3A1AG082A	G2A1AG039A	G3A3AG007A	G2A1AG027A	A3A4AG097A
SIO2	46.68	46.88	46.35	45.69	46.11	44.00
TIO2	.59	.69	.87	1.27	.85	2.93
AL203	18.82	18.99	19.12	22.15	19.46	17.98
CR203	.25	.21	.24	.19	.21	.22
FEO	11.12	11.18	11.33	11.33	11.57	11.90
MGO	10.27	9.79	10.04	7.33	8.53	7.44
CAO	13.24	12.90	12.23	12.24	12.80	13.09
NA2O	.33	.20	.22	.30	.13	.44
K2O	.14	.11	.07	.04	.00	.12
TOTAL	101.44	100.95	100.47	100.54	99.64	98.10
QTZ	-	-	-	-	-	-
OR	.830	.650	.410	.240	-	.710
AB	2.790	1.690	1.860	2.540	1.100	3.720
AN	49.460	50.600	50.980	58.980	52.520	46.730
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	6.770	5.600	4.050	.730	4.590	7.600
EN	15.570	18.550	18.670	15.560	18.550	14.800
FS	11.710	14.610	14.300	15.800	17.170	13.440
FO	7.010	4.090	4.440	1.890	1.880	2.610
FA	5.810	3.550	3.750	2.120	1.920	2.620
ILM	1.120	1.310	1.650	2.410	1.610	5.560
CHR	.370	.310	.350	.280	.310	.320
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	A3A2AG123A	A3A4AG109A	G1H0AG018A	G2A1AG090A	G1H0AC027A	G3A3AG022A
SIO2	45.66	46.96	45.32	46.83	49.15	45.66
TIO2	3.03	.98	1.78	.54	.77	2.87
AL2O3	13.26	16.55	19.76	15.72	15.09	18.44
CR2O3	.38	.24	.24	.07	.29	.33
FEO	11.98	12.20	12.31	12.41	12.43	12.45
MGO	11.67	9.17	7.11	9.45	8.10	8.43
CAO	12.30	12.71	12.45	12.36	11.80	12.05
NA2O	.54	.24	.29	.33	.56	.66
K2O	.18	.05	.13	.00	.29	.56
TOTAL	99.01	99.08	99.40	97.72	98.48	101.46
QTZ	-	-	-	-	2.200	-
OR	1.060	.300	.770	-	1.710	3.310
AB	4.570	2.030	2.450	2.790	4.740	5.580
AN	33.230	43.940	52.230	41.410	37.810	45.700
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	11.610	7.980	3.980	8.310	8.660	5.880
EN	20.900	21.300	15.990	20.970	20.170	13.300
FS	11.990	19.200	17.570	19.460	21.300	11.300
FO	5.720	1.070	1.200	1.790	-	5.390
FA	3.610	1.070	1.460	1.830	-	5.050
ILM	5.750	1.860	3.380	1.030	1.460	5.450
CHR	.560	.350	.350	.100	.430	.490
COR	-	-	-	-	-	-

	G1H0AG019A	G2A3AG011A	G2A1AG084A	G3A3AG057A	G3A2CG021A	A3A5AG063A
SIO2	44.78	45.96	43.86	52.65	44.91	43.60
TIO2	2.80	1.00	3.71	1.09	.99	2.99
AL2O3	16.46	17.46	18.12	15.62	18.33	14.88
CR2O3	.17	.36	.21	.02	.27	.22
FEO	12.53	12.55	12.60	12.73	12.78	12.98
MGO	8.86	9.80	8.69	2.88	9.77	9.64
CAO	12.92	12.21	12.67	14.49	12.37	11.35
NA2O	.62	.39	.40	.24	.26	.34
K2O	.18	.42	.10	.28	.07	.10
TOTAL	99.31	100.15	100.37	100.01	99.74	96.10
QTZ	-	-	-	11.750	-	-
OR	1.060	2.480	.590	1.650	.410	.590
AB	5.250	3.300	3.380	2.030	2.200	2.880
AN	41.600	44.650	47.350	40.720	48.640	38.780
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	9.390	6.650	6.470	13.010	5.310	7.320
EN	14.160	14.630	14.780	7.170	14.300	19.420
FS	11.700	12.630	11.490	21.560	12.700	15.140
FO	5.540	6.850	4.810	-	7.030	3.210
FA	5.050	6.520	4.120	-	6.880	2.760
ILM	5.320	1.900	7.050	2.070	1.880	5.680
CHR	.250	.530	.310	.030	.400	.320
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	G2A1AG029B	A3A3GG068A	G3A3AG003A	G3A1GG050A	A3A1AG086B	A3A1AG086A
SIO2	45.30	44.86	40.66	43.63	44.44	46.36
TIO2	1.64	2.91	2.81	3.09	.65	.66
AL203	18.33	15.88	20.15	16.15	16.55	16.88
CR203	.25	.25	.20	.20	.27	.27
FEO	13.04	13.05	13.16	13.46	13.51	13.52
MGO	8.76	7.11	9.85	8.14	10.87	10.84
CAO	11.96	11.80	11.70	12.04	11.78	11.78
NA20	.32	.58	.33	.38	.24	.24
K20	.05	.13	.07	.06	.08	.08
TOTAL	99.64	96.56	98.93	97.16	98.41	100.64
QTZ	-	.410	-	-	-	-
OR	.300	.770	.410	.350	.470	.470
AB	2.710	4.910	2.790	3.220	2.030	2.030
AN	48.430	40.340	53.300	42.190	43.850	44.750
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	4.550	7.600	1.980	7.330	6.090	5.720
EN	16.690	17.710	5.590	16.780	14.480	17.970
FS	16.080	18.940	4.410	16.090	12.570	15.650
FO	3.590	-	13.270	2.450	8.820	6.320
FA	3.810	-	11.540	2.590	8.440	6.070
ILM	3.110	5.530	5.340	5.870	1.230	1.250
CHR	.370	.370	.290	.290	.400	.400
COR	-	-	-	-	-	-

	G2A1CC122A	G3A3AG013A	A3A3AG054A	A3A1AG099A	G2A3AG126A	G3A1AG114A
SIO2	45.29	44.16	43.58	45.16	42.88	44.44
TIO2	1.28	2.60	4.93	2.32	3.33	2.97
AL203	19.67	18.57	14.88	17.40	18.23	14.96
CR203	.19	.21	.17	.21	.21	.23
FEO	13.53	13.61	13.73	13.76	13.80	13.95
MGO	9.43	9.30	7.67	8.52	9.71	9.73
CAO	11.94	10.98	10.96	12.02	13.20	11.43
NA20	.46	.38	.18	.39	.23	.42
K20	.08	.09	.10	.15	.07	.08
TOTAL	101.87	99.91	96.20	99.93	101.64	98.20
QTZ	-	-	2.740	-	-	-
OR	.470	.530	.590	.890	.410	.470
AB	3.890	3.220	1.520	3.300	1.950	3.550
AN	51.370	48.700	39.500	45.290	48.510	38.700
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	3.280	2.410	6.210	5.990	7.090	7.520
EN	12.070	15.410	19.100	16.060	10.200	18.620
FS	11.600	13.650	16.920	16.090	8.290	15.770
FO	8.000	5.430	-	3.620	9.800	3.930
FA	8.470	5.300	-	3.990	8.780	3.670
ILM	2.430	4.940	9.360	4.410	6.320	5.640
CHR	.280	.310	.250	.310	.310	.340
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	A3A3AG034A	G2A1AG018A	G3A1AG094A	G2A1AG026A	G3A3AG026A	G2A1AG024A
SIO2	45.56	43.02	42.44	43.22	42.40	40.80
TIO2	2.73	3.53	4.07	3.40	2.77	3.33
AL2O3	18.25	18.12	14.90	16.02	18.82	17.99
CR2O3	.20	.21	.30	.22	.20	.22
FEO	13.99	14.05	14.07	14.17	14.19	14.23
MGO	8.94	9.22	8.10	8.81	7.25	8.88
CAO	11.60	12.31	11.80	11.87	10.66	13.08
NA2O	.31	.32	.29	.27	.41	.19
K2O	.12	.05	.07	.08	.11	.06
TOTAL	101.70	100.83	95.87	98.07	96.79	98.78
QTZ	-	-	-	-	-	-
OR	.710	.300	.410	.470	.650	.350
AB	2.620	2.710	2.450	2.280	3.470	1.610
AN	48.050	47.860	39.150	42.270	49.190	48.060
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	3.960	5.520	8.100	6.940	1.540	7.030
EN	17.590	12.240	17.690	16.360	12.840	7.450
FS	16.600	10.550	16.530	15.070	15.150	6.890
FO	3.270	7.510	1.740	3.910	3.650	10.280
FA	3.400	7.140	1.800	3.970	4.750	10.470
ILM	5.180	6.700	7.730	6.460	5.260	6.320
CHR	.290	.310	.440	.320	.290	.320
COR	-	-	-	-	-	-

	G3A2AG031A	G3A3AG019A	G1H0LG015A	G2A3AG054B	G2A3AG128A	A3A4GG276A
SIO2	45.42	44.06	47.67	43.48	44.07	44.44
TIO2	2.54	3.32	1.58	3.95	3.56	2.95
AL2O3	15.15	17.25	17.28	16.80	16.69	15.81
CR2O3	.21	.22	.21	.22	.22	.25
FEO	14.26	14.29	14.32	14.34	14.35	14.40
MGO	9.96	8.69	8.24	7.62	8.18	8.81
CAO	11.59	12.27	13.00	13.12	12.25	11.82
NA2O	.35	.34	.44	.25	.38	.37
K2O	.11	.06	.07	.09	.12	.10
TOTAL	99.59	100.50	102.81	99.88	99.83	98.95
QTZ	-	-	-	-	-	-
OR	.650	.350	.410	.530	.710	.590
AB	2.960	2.880	3.720	2.120	3.220	3.130
AN	39.440	45.370	44.970	44.450	43.480	41.180
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	7.540	6.470	8.150	8.620	7.220	7.290
EN	19.300	15.030	17.330	14.730	15.530	17.120
FS	16.970	14.280	19.850	15.230	15.460	16.660
FO	3.860	4.640	2.230	2.970	3.390	3.380
FA	3.740	4.860	2.820	3.390	3.720	3.620
ILM	4.820	6.310	3.000	7.500	6.760	5.600
CHR	.310	.320	.310	.320	.320	.370
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	G3A1AG021A	G2A1AG091A	G2A1AG114A	A3A3AG029A	A3A4GG171A	G2A3AG092A
SIO2	43.68	43.84	44.24	43.31	43.09	43.82
TIO2	3.68	3.48	3.45	3.13	3.53	4.20
AL203	13.43	16.42	16.53	16.46	16.69	17.41
CR203	.25	.21	.22	.16	.21	.26
FEO	14.40	14.46	14.50	14.51	14.51	14.53
MGO	9.86	8.67	8.52	8.09	8.28	8.12
CAO	13.74	11.75	12.05	11.24	12.20	12.07
NA2O	.21	.32	.36	.63	.33	.32
K2O	.11	.11	.10	.11	.10	.09
TOTAL	99.36	99.27	99.98	97.63	98.92	100.83
QTZ	-	-	-	-	-	-
OR	.650	.650	.590	.650	.590	.530
AB	1.780	2.710	3.050	5.330	2.790	2.710
AN	35.380	43.040	43.190	41.760	43.770	45.800
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	13.690	6.370	6.930	5.850	7.000	5.880
EN	15.920	16.480	16.200	13.460	14.030	15.980
FS	13.060	15.740	15.830	14.260	14.040	15.420
FO	6.050	3.580	3.520	4.690	4.620	2.980
FA	5.470	3.770	3.790	5.470	5.090	3.170
ILM	6.990	6.610	6.550	5.940	6.700	7.980
CHR	.370	.310	.320	.240	.310	.380
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	G3A1GG043A	A3A5AG145A	A3A1GG037A	A3A3AG093A	A3A4GG124A	G3A2GG068A
SIO2	45.02	42.94	43.73	43.48	42.27	43.64
TIO2	1.24	3.73	3.44	3.39	3.69	3.02
AL2O3	14.96	15.52	16.67	16.68	17.16	16.20
CR2O3	.22	.23	.20	.19	.24	.26
FEO	14.55	14.56	14.56	14.59	14.61	14.63
MGO	10.04	8.02	8.67	8.33	8.62	8.81
CAO	11.73	11.28	11.99	11.17	12.38	12.01
NA2O	.24	.22	.30	.40	.15	.32
K2O	.05	.05	.12	.10	.04	.14
TOTAL	98.06	96.57	99.69	98.33	99.17	99.02
QTZ	-	-	-	-	-	-
OR	.300	.300	.710	.590	.240	.830
AB	2.030	1.860	2.540	3.380	1.270	2.710
AN	39.600	41.210	43.790	43.420	46.030	42.360
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	7.770	6.160	6.550	5.010	6.420	7.190
EN	17.730	18.560	15.410	15.900	13.420	14.750
FS	17.350	18.930	14.900	16.120	12.840	14.560
FO	5.100	.990	4.330	3.400	5.640	5.040
FA	5.500	1.120	4.620	3.790	5.940	5.480
ILM	2.360	7.080	6.530	6.440	7.010	5.740
CHR	.320	.340	.290	.280	.350	.380
COR	-	-	-	-	-	-

	G2A3GG034A	A3A4GG012A	G2A3AG067A	G3A1AG112A	G3A2AG032A	A3A2GG075A
SIO2	44.47	42.00	47.07	42.71	43.68	42.85
TIO2	3.51	1.90	.91	3.36	1.94	3.38
AL2O3	16.01	17.64	15.54	16.51	13.15	16.83
CR2O3	.35	.15	.35	.19	.29	.17
FEO	14.63	14.64	14.65	14.65	14.67	14.67
MGO	8.60	9.00	10.36	8.53	12.24	8.75
CAO	12.10	13.68	11.70	12.47	9.53	11.59
NA2O	.46	.03	.24	.30	.04	.36
K2O	.44	.00	.06	.04	.07	.00
TOTAL	100.56	99.04	100.88	98.73	95.60	98.60
QTZ	-	-	-	-	-	-
OR	2.600	-	.350	.240	.410	-
AB	3.890	.250	2.030	2.540	.340	3.050
AN	40.320	48.000	41.150	43.590	35.500	44.310
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	8.230	8.300	7.050	7.630	4.920	5.510
EN	14.040	8.750	20.330	13.020	22.820	14.240
FS	13.610	9.220	19.770	12.990	17.580	13.860
FO	5.170	9.580	3.830	5.760	5.370	5.290
FA	5.530	11.120	4.110	6.330	4.560	5.680
ILM	6.670	3.610	1.730	6.380	3.680	6.420
CHR	.520	.220	.520	.280	.430	.250
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	G2A1AG045A	G2A3AG054A	A3A4GG080A	G2A1AG050A	A3A4AG134A	G3A1AG123A
SIO2	42.92	49.45	44.05	39.70	43.04	43.20
TIO2	3.56	2.17	3.13	3.73	3.31	2.58
AL203	16.81	11.98	15.42	17.83	16.20	18.69
CR203	.22	.26	.23	.23	.21	.25
FEO	14.69	14.71	14.74	14.79	14.82	14.84
MGO	8.63	9.53	9.48	8.83	8.79	8.41
CAO	12.11	9.41	11.57	12.87	12.00	11.00
NA2O	.32	.44	.35	.22	.30	.28
K2O	.06	.24	.10	.04	.05	.08
TOTAL	99.32	98.20	99.07	98.25	98.73	99.33
QTZ	-	4.640	-	-	-	-
OR	.350	1.420	.590	.240	.300	.470
AB	2.710	3.720	2.960	1.860	2.540	2.370
AN	44.260	30.010	40.210	47.550	42.710	49.510
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	6.610	6.960	7.180	6.810	7.020	2.120
EN	13.640	23.730	16.800	5.620	14.440	13.410
FS	13.270	23.200	15.440	5.310	14.230	14.580
FO	5.500	-	4.770	11.470	5.220	5.280
FA	5.900	-	4.830	11.960	5.670	6.330
ILM	6.760	4.120	5.940	7.080	6.290	4.900
CHR	.320	.380	.340	.340	.310	.370
COR	-	-	-	-	-	-

	G2A1AG121A	G2A3AG115A	A3A1AG057A	G3A1AG009A	G1H0AG026A	A3A5GG025A
SIO2	43.84	43.77	43.93	43.47	44.67	42.09
TIO2	3.76	3.43	3.64	3.11	3.40	3.41
AL203	15.12	15.63	16.50	15.56	16.11	15.54
CR203	.22	.24	.14	.24	.25	.20
FEO	14.86	14.87	14.92	14.93	14.95	14.96
MGO	8.72	7.92	8.79	8.89	8.94	8.48
CAO	11.68	11.91	11.99	11.89	12.75	11.91
NA2O	.36	.25	.38	.22	.43	.21
K2O	.11	.11	.14	.04	.13	.06
TOTAL	98.68	98.13	100.43	98.36	101.63	96.87
QTZ	-	-	-	-	-	-
OR	.650	.650	.830	.240	.770	.350
AB	3.050	2.120	3.220	1.860	3.640	1.780
AN	39.320	41.200	42.900	41.350	41.650	41.280
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	7.780	7.470	6.920	7.360	9.020	7.430
EN	17.490	17.290	14.750	16.560	14.280	14.460
FS	16.820	18.790	14.330	16.510	13.870	14.840
FO	2.960	1.710	5.000	3.910	5.600	4.660
FA	3.140	2.040	5.360	4.300	5.990	5.270
ILM	7.140	6.510	6.910	5.910	6.460	6.480
CHR	.320	.350	.210	.350	.370	.290
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	A3A2GG050A	G3A1AG110A	G3A1GG107A	G2A3AG106A	A3A2AG072A	A3A4AG151A
SIO2	43.05	43.02	42.05	35.78	44.26	42.62
TIO2	2.42	3.42	3.57	4.37	2.75	3.65
AL2O3	16.02	15.93	16.53	19.19	20.46	15.98
CR2O3	.25	.22	.20	.17	.19	.23
FEO	14.97	14.97	14.98	14.98	15.05	15.09
MGO	10.31	8.73	8.87	10.22	8.50	8.87
CAO	11.11	11.91	12.44	14.39	11.31	11.99
NA2O	.05	.33	.05	.01	.42	.27
K2O	.00	.07	.00	.05	.06	.09
TOTAL	98.18	98.60	98.71	99.16	102.99	98.79
QTZ	-	-	-	-	-	-
OR	-	.410	-	-	.350	.530
AB	.420	2.790	.420	-	3.550	2.280
AN	43.490	41.780	44.880	-	53.770	42.130
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	4.860	7.230	7.030	-	.980	7.250
EN	16.770	14.470	13.930	-	11.540	13.940
FS	15.200	14.410	13.520	-	12.500	13.560
FO	6.240	5.090	5.720	-	6.750	5.710
FA	6.240	5.590	6.120	-	8.050	6.120
ILM	4.600	6.500	6.780	-	5.220	6.930
CHR	.370	.320	.290	-	.280	.340
COR	-	-	-	-	-	-

	G3A2AG052A	G3A1AG051A	A3A5AG063B	G3A3GG020A	A3A1AG117A	G2A1AG107A
SIO2	44.00	42.49	43.68	43.94	44.28	43.55
TIO2	3.09	.83	3.00	3.44	3.59	3.87
AL2O3	16.42	22.06	16.41	16.87	15.52	15.11
CR2O3	.28	.23	.21	.21	.19	.22
FEO	15.09	15.15	15.17	15.19	15.20	15.22
MGO	8.27	8.57	8.99	8.37	8.14	8.79
CAO	11.75	10.33	11.67	11.72	11.78	11.61
NA2O	.02	.33	.30	.29	.44	.40
K2O	.13	.06	.08	.06	.16	.11
TOTAL	99.05	100.06	99.51	100.09	99.30	98.89
QTZ	-	-	-	-	-	-
OR	.770	.350	.470	.350	.950	.650
AB	.170	2.790	2.540	2.450	3.720	3.380
AN	44.330	51.250	43.200	44.550	39.900	39.110
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	5.830	-	6.140	5.670	7.740	7.720
EN	18.240	10.080	14.940	15.910	16.230	16.300
FS	19.800	12.400	15.160	16.810	17.470	15.910
FO	1.650	7.890	5.220	3.460	2.830	3.920
FA	1.980	10.700	5.840	4.030	3.360	4.220
ILM	5.870	1.580	5.700	6.530	6.820	7.350
CHR	.410	.340	.310	.310	.280	.320
COR	-	2.670	-	-	-	-

TABLE 1. - CONTINUED

	G2A3AG072B	G3A2GG103A	G3A2GG071A	A3A2AG049A	G2A1GG034A	G2A1AG118A
SIO2	44.38	44.04	44.24	45.13	39.46	43.11
TIO2	3.65	3.18	2.91	1.37	3.85	3.00
AL2O3	15.79	16.27	16.91	12.73	18.10	16.91
CR2O3	.27	.23	.24	.10	.21	.22
FEO	15.23	15.23	15.24	15.29	15.30	15.36
MGO	8.78	8.27	8.35	9.91	8.76	8.36
CAO	12.17	12.23	11.89	10.61	13.00	12.24
NA2O	.35	.38	.37	.81	.19	.24
K2O	.09	.14	.14	.06	.03	.05
TOTAL	100.71	99.97	100.31	95.99	98.92	99.48
QTZ	-	-	-	-	-	-
OR	.530	.830	.830	.350	.180	.300
AB	2.980	3.220	3.130	6.850	1.610	2.030
AN	41.250	42.280	44.070	30.920	48.450	44.920
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	7.990	7.680	6.230	9.070	6.700	6.600
EN	16.310	14.170	14.240	16.580	4.600	13.100
FS	16.190	15.490	15.730	17.290	4.540	14.510
FO	3.900	4.500	4.600	5.670	12.070	5.410
FA	4.260	5.420	5.600	6.520	13.140	6.600
ILM	6.930	6.040	5.530	2.600	7.310	5.700
CHR	.400	.340	.350	.150	.310	.320
COR	-	-	-	-	-	-

	G2A1AG066A	A3A5GG086A	A3A5AG219A	A3A3AG056A	G2A1AG080A	A3A4AG076A
SIO2	45.46	43.70	42.78	41.44	43.61	43.41
TIO2	2.07	3.45	3.63	.73	4.02	3.74
AL2O3	15.08	14.26	15.17	21.79	14.87	17.09
CR2O3	.30	N.A.	N.A.	.26	.22	.24
FEO	15.38	15.47	15.48	15.53	15.58	15.62
MGO	9.39	8.58	8.55	12.86	8.95	8.22
CAO	11.77	11.68	11.94	9.62	11.50	12.01
NA2O	.23	N.A.	N.A.	.28	.33	.35
K2O	.05	N.A.	N.A.	.13	.10	.11
TOTAL	99.74	97.13	97.55	102.64	99.18	100.79
QTZ	-	-	-	-	-	-
OR	.300	-	-	.770	.590	.650
AB	1.950	-	-	2.370	2.790	2.960
AN	39.970	38.910	41.390	47.730	38.800	44.740
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	7.690	7.950	7.450	-	7.620	6.200
EN	18.750	20.720	17.740	5.990	17.200	13.190
FS	19.700	22.020	18.690	5.070	16.810	14.370
FO	3.250	.450	2.490	18.240	3.560	5.100
FA	3.760	.530	2.890	17.000	3.840	6.120
ILM	3.930	6.550	6.890	1.390	7.630	7.100
CHR	.440	-	-	.380	.320	.350
COR	-	-	-	3.700	-	-

TABLE 1. - CONTINUED

	G2A1AG083B	G3A1AG073A	G3A3AG036A	A3A4AG273A	G1H0AG012A	A3A4AG234A
SIO2	42.35	47.37	41.67	47.31	43.59	41.11
TIO2	3.60	2.02	3.90	2.42	3.48	4.68
AL2O3	15.84	13.06	15.77	12.34	17.33	15.08
CR2O3	.24	.48	.17	.22	.23	.21
FEO	15.64	15.70	15.71	15.73	15.73	15.73
MGO	8.74	5.94	7.75	10.54	7.00	8.09
CAO	12.05	16.06	11.15	10.21	13.06	12.05
NA2O	.32	.28	.38	.12	.37	.35
K2O	.08	.02	.06	.02	.14	.08
TOTAL	98.87	100.93	96.58	98.93	100.93	97.38
QTZ	-	.770	-	1.500	-	-
OR	.470	.120	.350	.120	.830	.470
AB	2.710	2.370	3.220	1.020	3.130	2.960
AN	41.550	34.320	41.150	33.070	45.210	39.340
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	7.610	18.940	5.920	7.340	8.170	8.530
EN	12.410	14.790	13.440	26.250	11.190	12.220
FS	12.870	25.080	15.500	24.700	14.730	12.720
FO	6.550	-	4.110	-	4.370	5.550
FA	7.490	-	5.220	-	6.340	6.370
ILM	6.840	3.840	7.410	4.600	6.610	8.890
CHR	.350	.710	.250	.320	.340	.310
COR	-	-	-	-	-	-

	G3A1AG025A	G3A3GG005A	A3A4AG166A	A3A3AG046A	A3A5AG192A	A3A5AG143A
SIO2	42.80	42.78	43.68	43.94	42.75	44.65
TIO2	4.27	3.52	3.62	3.77	3.38	2.07
AL2O3	12.92	16.08	14.35	15.35	17.05	13.32
CR2O3	.28	.11	.26	.21	.21	.32
FEO	15.81	15.82	15.86	15.97	15.98	16.03
MGO	8.79	9.48	8.91	9.00	7.99	9.98
CAO	11.65	14.26	12.01	11.13	11.54	11.10
NA2O	.21	.34	.29	.37	.32	.06
K2O	.01	.00	.07	.16	.08	.01
TOTAL	96.73	102.38	99.04	99.90	99.31	97.55
QTZ	-	-	-	-	-	-
OR	.060	-	.410	.950	.470	.060
AB	1.780	2.880	2.450	3.130	2.710	.510
AN	34.280	42.350	37.650	39.750	44.850	36.050
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	9.820	11.860	9.160	6.460	5.180	7.940
EN	19.320	7.740	16.590	16.420	12.660	21.090
FS	19.190	7.580	17.140	16.790	15.010	21.840
FO	1.800	11.120	3.920	4.200	5.070	2.640
FA	1.970	12.020	4.470	4.730	6.620	3.010
ILM	8.110	6.690	6.880	7.160	6.420	3.930
CHR	.410	.160	.380	.310	.310	.470
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	A3A3AG013A	G3A3AG002A	G3A2AG053A	G1H0AG011A	G1H0AG007A	A3A5GG012A
SIO2	39.08	46.25	43.83	43.70	42.57	42.98
TIO2	3.87	2.24	3.53	2.83	3.22	3.04
AL2O3	15.42	15.37	14.58	16.47	13.42	14.84
CR2O3	.20	.12	.25	.22	.27	.25
FEO	16.04	16.05	16.14	16.16	16.16	16.19
MGO	10.05	9.97	8.43	9.71	11.18	9.86
CAO	11.20	11.45	11.10	12.91	11.22	11.07
NA2O	.23	.40	.41	.31	.53	.12
K2O	.12	.03	.16	.09	.18	.02
TOTAL	96.22	101.86	98.44	102.40	98.75	98.36
QTZ	-	-	-	-	-	-
OR	.710	.180	.950	.530	1.060	.120
AB	1.950	3.380	3.470	2.620	4.480	1.020
AN	40.690	40.060	37.470	43.280	33.710	39.900
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	6.210	6.990	7.350	8.670	9.170	6.270
EN	7.470	17.980	16.560	10.290	11.420	16.720
FS	6.830	18.590	18.610	10.560	9.900	16.680
FO	12.300	4.800	3.110	9.730	11.510	5.490
FA	12.400	5.470	3.850	11.000	10.990	6.030
ILM	7.350	4.250	6.700	5.370	6.120	5.770
CHR	.290	.180	.370	.320	.400	.370
COR	-	-	-	-	-	-

	G3A2AG033A	A3A3AG049A	G1H0AG030A	G3A2AG037A	G3A1GG083A	G3A1AG055A
SIO2	42.72	40.89	43.86	40.28	42.05	40.27
TIO2	2.61	3.35	3.33	3.20	4.24	4.39
AL2O3	16.36	19.66	16.63	16.16	14.50	15.66
CR2O3	.36	.23	.21	.22	.22	.21
FEO	16.20	16.24	16.25	16.26	16.32	16.43
MGO	9.63	9.68	8.22	9.83	9.27	8.48
CAO	11.68	11.45	12.55	13.04	11.57	12.29
NA2O	.15	.34	.42	.24	.03	.29
K2O	.08	.13	.14	.12	.00	.07
TOTAL	99.79	101.98	101.61	99.34	98.21	98.10
QTZ	-	-	-	-	-	-
OR	.470	.770	.830	.710	-	.410
AB	1.270	2.880	3.550	1.990	.250	2.450
AN	43.730	51.740	43.080	42.[illegible]0	39.430	41.220
LU	-	-	-	-	-	-
NEPH	-	-	-	.020	-	-
WO	5.930	2.120	8.010	9.200	7.500	8.250
EN	12.430	4.310	11.450	4.520	16.930	8.720
FS	13.020	4.310	13.510	4.500	16.700	9.390
FO	8.100	13.870	6.320	13.990	4.320	8.690
FA	9.350	15.270	8.220	15.350	4.690	10.310
ILM	4.960	6.360	6.320	6.080	8.050	8.340
CHR	.530	.340	.310	.320	.320	.310
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	A3A4AG014A	G1H0AG004A	G1H0AC029B	G3A3GG006A	G3A2GG126A	G3A3GG006B
SIO2	46.97	43.81	41.90	44.07	48.47	44.13
TIO2	1.41	4.52	3.94	3.79	.81	3.72
AL2O3	10.62	12.96	16.64	13.29	11.78	13.32
CR2O3	.42	.20	.22	.24	.43	.25
FEO	16.79	16.80	16.92	16.93	17.06	17.12
MGO	12.20	7.50	8.49	8.37	10.98	9.08
CAO	10.49	11.44	11.94	11.34	11.03	11.34
NA2O	.21	.40	.35	.29	.14	.28
K2O	.04	.16	.13	.10	.03	.08
TOTAL	99.14	97.79	100.53	98.42	100.73	99.32
QTZ	-	-	-	-	-	-
OR	.240	.950	.770	.590	.180	.470
AB	1.780	3.380	2.960	2.450	1.180	2.370
AN	27.920	33.100	43.450	34.670	31.430	34.850
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	10.070	9.880	6.590	9.020	9.730	8.940
EN	25.140	18.190	9.460	18.510	25.660	18.200
FS	23.290	22.610	10.900	21.870	27.800	20.180
FO	3.670	.340	8.190	1.640	1.180	3.100
FA	3.750	.470	10.410	2.130	1.410	3.780
ILM	2.680	8.580	7.480	7.200	1.540	7.070
CHR	.620	.290	.320	.350	.630	.370
COR	-	-	-	-	-	-

	G2A1AG111A	A3A1AG130A	A3A2GG029A	A3A4CC100A	G2A1AG022A	A3A4GG111A
SIO2	42.91	44.88	43.24	47.21	46.29	43.94
TIO2	4.09	.57	4.28	1.05	1.66	4.33
AL2O3	16.32	10.52	13.57	11.92	11.08	12.26
CR2O3	.20	.28	.29	.38	.38	.23
FEO	17.22	17.40	17.46	17.91	18.34	18.45
MGO	8.97	17.25	9.68	10.99	10.82	7.16
CAO	11.22	9.12	10.13	10.22	10.35	11.22
NA2O	.26	.26	.17	.36	.31	.41
K2O	.08	.04	.03	.06	.04	.16
TOTAL	101.28	100.32	98.85	100.10	99.26	98.16
QTZ	-	-	-	-	-	-
OR	.470	.240	.180	.350	.240	.950
AB	2.200	2.200	1.440	3.050	2.620	3.470
AN	43.130	27.420	36.180	30.730	28.720	31.140
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	5.230	7.440	5.880	8.340	9.450	10.240
EN	13.520	16.570	19.930	21.750	21.520	16.950
FS	14.940	11.870	20.450	24.500	24.450	25.230
FO	6.180	18.490	2.930	3.930	3.800	.610
FA	7.530	14.600	3.310	4.880	4.760	1.010
ILM	7.770	1.080	8.130	1.990	3.150	8.220
CHR	.290	.410	.430	.560	.560	.340
COR	-	-	-	-	-	-

TABLE 1. - CONTINUED

	G2A1AG083A	A3A4AG158A	G3A2GG164A	G3A3AG008A	G3A3AG002B	A3A1AG048A
SIO2	44.38	48.13	45.18	46.90	41.14	46.78
TIO2	2.56	.98	1.70	1.63	1.23	4.38
AL2O3	11.42	12.34	11.66	14.43	19.85	5.86
CR2O3	.36	.21	.30	.18	.26	.19
FEO	18.54	18.65	19.09	19.13	19.67	20.37
MGO	10.82	6.50	12.30	7.67	6.21	13.83
CAO	10.21	12.12	10.41	10.63	10.86	11.05
NA2O	.30	.19	.30	.39	.25	.11
K2O	.08	.04	.11	.06	.06	.06
TOTAL	98.66	99.17	101.04	101.02	99.52	102.63
QTZ	-	2.360	-	-	-	-
OR	.470	.240	.650	.350	.350	.350
AB	2.540	1.610	2.540	3.300	2.120	.930
AN	29.580	32.700	30.150	37.450	52.870	15.320
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	8.800	11.450	8.980	6.380	.420	16.490
EN	18.630	16.190	16.570	17.330	5.090	27.380
FS	20.400	32.450	17.310	29.290	11.150	23.850
FO	5.830	-	9.850	1.240	7.270	4.950
FA	7.030	-	11.340	2.310	17.540	4.750
ILM	4.860	1.860	3.230	3.100	2.340	8.320
CHR	.530	.310	.440	.270	.380	.280
COR	-	-	-	-	-	-

	A3A5AG009A
SIO2	48.15
TIO2	2.34
AL2O3	6.42
CR2O3	.02
FEO	23.16
MGO	4.04
CAO	14.17
NA2O	1.14
K2O	.46
TOTAL	99.90
QTZ	-
OR	2.720
AB	9.650
AN	11.040
LU	-
NEPH	-
WO	24.740
EN	8.840
FS	33.960
FO	.860
FA	3.620
ILM	4.440
CHR	.030
COR	-

TABLE 2. GLASS ANALYSES - II. FECUNDITATIS TYPE B

	G2A3AG100A	A3A2AG070A	A3A5GG088A	A3A1AG049A	G3A3GG072A
SIO2	44.25	34.79	42.08	41.99	41.07
TIO2	6.18	12.98	5.10	5.12	7.10
AL2O3	6.38	13.04	13.64	15.03	13.94
CR2O3	.42	.25	.22	.16	.19
FEO	13.54	15.12	16.74	16.93	17.37
MGO	13.92	9.79	7.54	7.74	7.74
CAO	16.48	10.31	11.22	10.20	11.02
NA2O	.06	.28	.48	.07	.34
K2O	.03	.03	.15	.08	.12
TOTAL	101.27	96.61	97.17	97.33	98.89
QTZ	-	-	-	-	-
OR	.180	.180	.890	.470	.710
AB	.510	2.370	4.060	.590	2.880
AN	17.050	34.240	34.620	40.460	36.160
LU	-	-	-	-	-
NEPH	-	-	-	-	-
WO	27.020	7.060	8.790	4.230	7.730
EN	22.430	16.610	15.080	18.970	16.230
FS	9.250	4.160	17.770	22.140	16.850
FO	8.570	5.450	2.590	.210	2.130
FA	3.900	1.510	3.370	.270	2.440
ILM	11.740	24.650	9.690	9.720	13.480
CHR	.620	.370	.320	.240	.280
COR	-	-	-	-	-

	G3A3AG021A	A3A5AG138A	G3A1GG074A	A3A4GG231A	A3A2AG073A
SIO2	42.59	42.82	39.60	42.41	43.18
TIO2	5.75	5.30	11.93	6.13	6.43
AL2O3	12.67	11.95	9.42	11.90	12.66
CR2O3	.18	.25	.24	.26	.15
FEO	18.05	18.22	18.68	19.06	19.32
MGO	7.19	7.90	8.67	9.24	6.29
CAO	10.86	10.98	10.88	10.52	10.69
NA2O	.51	.38	.31	.40	.49
K2O	.10	.15	.06	.23	.24
TOTAL	97.90	97.96	99.79	100.15	99.45
QTZ	-	-	1.220	-	.490
OR	.590	.890	.350	1.360	1.420
AB	4.320	3.220	2.620	3.380	4.150
AN	31.990	30.460	24.140	30.000	31.640
LU	-	-	-	-	-
NEPH	-	-	-	-	-
WO	9.140	10.030	12.460	9.270	8.930
EN	16.700	17.550	21.590	16.480	15.660
FS	21.910	21.850	14.390	17.660	24.730
FO	.840	1.490	-	4.570	-
FA	1.220	2.040	-	5.400	-
ILM	10.920	10.070	22.660	11.640	12.210
CHR	.270	.370	.350	.380	.220
COR	-	-	-	-	-

TABLE 2. - CONTINUED

	G3A1CG071A	G3A2GG091A	G1H0AG003A
SIO2	42.98	42.64	39.17
TIO2	5.85	6.81	7.71
AL2O3	11.68	13.32	9.57
CR2O3	.19	.19	.23
FEO	20.19	20.33	22.23
MGO	6.06	6.65	8.03
CAO	11.22	11.14	11.26
NA2O	.48	.57	.47
K2O	.13	.27	.22
TOTAL	98.78	101.91	98.87
QTZ	-	-	-
OR	.770	1.600	1.300
AB	4.060	4.820	3.980
AN	29.330	32.990	23.350
LU	-	-	-
NEPH	-	-	-
WO	10.990	9.300	13.570
EN	14.940	12.770	9.970
FS	26.970	19.980	13.910
FO	.110	2.060	7.030
FA	.210	4.590	10.800
ILM	11.110	12.930	14.640
CHR	.280	.280	.340
COR	-	-	-

TABLE 3. GLASS ANALYSES - III. HIGHLAND BASALT

	G2A3AG044A	A1B2CC005A	G3A3AG067A	A1B1GG001A	G1H0AG007B	A3A4AG209B
SIO2	46.37	44.03	44.93	45.32	45.97	44.89
TIO2	.12	.11	.23	.14	.34	.34
AL203	29.80	29.39	26.95	27.58	25.10	29.06
CR203	.12	.05	.00	.09	.10	.08
FEO	.30	2.79	3.66	3.71	3.90	3.95
MGO	.36	5.53	4.39	7.94	8.81	5.44
CAO	19.41	16.80	16.62	15.48	12.73	16.51
NA2O	.45	.29	.30	.05	.08	.06
K2O	.34	.01	.09	.00	.00	.04
TOTAL	97.28	99.01	97.16	100.32	97.03	100.37
QTZ	4.090	-	.070	-	2.130	-
OR	2.010	.060	.530	-	-	.240
AB	3.810	2.450	2.540	.420	.680	.510
AN	78.290	78.870	71.930	75.030	63.160	78.910
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	7.520	1.870	4.400	.740	-	1.250
EN	.900	5.350	10.930	12.930	21.940	9.970
FS	.250	1.900	6.340	4.250	6.510	4.870
FO	-	5.900	-	4.790	-	2.510
FA	-	2.310	-	1.740	-	1.350
ILM	.230	.210	.440	.270	.650	.650
CHR	.180	.070	-	.130	.150	.120
COR	-	-	-	-	1.820	-

	G3A2GG093A	G2A3AG064A	A3A2GG088A	A3A4GG005A	G2A3GG090A	G3A1GG019A
SIO2	45.18	44.59	45.21	43.39	45.36	46.21
TIO2	.24	.25	.14	.16	.22	.23
AL203	27.87	29.70	28.72	27.48	27.58	24.33
CR203	.13	.10	.11	.13	.10	.10
FEO	4.03	4.06	4.13	4.21	4.33	4.58
MGO	9.80	7.42	6.80	11.74	8.14	9.89
CAO	14.62	16.60	14.66	14.01	15.40	14.18
NA2O	.06	.05	.06	.10	.13	.55
K2O	.01	.00	.00	.00	.01	.00
TOTAL	101.95	102.77	99.84	101.23	101.26	100.06
QTZ	-	-	-	-	-	-
OR	.060	-	-	-	.060	-
AB	.510	.420	.510	.850	1.100	4.650
AN	72.530	80.820	72.730	69.510	74.640	63.920
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	-	.640	-	-	.730	2.680
EN	12.630	5.050	16.930	6.630	10.870	12.970
FS	3.570	1.900	7.260	1.670	4.020	4.180
FO	8.250	9.410	-	15.850	6.590	8.170
FA	2.570	3.900	-	4.390	2.690	2.900
ILM	.460	.470	.270	.300	.420	.440
CHR	.190	.150	.160	.190	.150	.150
COR	1.180	-	1.970	1.840	-	-

TABLE 3. - CONTINUED

	A3A4AG177A	A3A4AG174A	G2A3AG093A	G2A1AG096B	G2A1AG096A	G3A1AG129A
SIO2	45.02	48.62	45.86	46.28	46.44	44.39
TIO2	.25	.37	.21	.30	.29	.26
AL2O3	28.01	29.38	27.49	24.75	24.87	24.87
CR2O3	.10	.15	.08	.10	.09	.10
FEO	4.79	4.82	5.07	5.30	5.35	5.36
MGO	5.65	2.51	7.98	10.28	10.23	9.82
CAO	15.79	16.45	15.14	14.18	14.16	14.44
NA2O	.22	.53	.24	.12	.12	.05
K2O	.04	.11	.01	.00	.00	.00
TOTAL	99.86	102.93	102.08	101.31	101.54	99.29
QTZ	-	3.320	-	-	-	-
OR	.240	.650	.060	-	-	-
AB	1.860	4.480	2.030	1.020	1.020	.420
AN	75.330	77.470	73.910	67.000	67.320	67.640
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	1.260	1.730	.500	1.400	1.220	1.670
EN	9.920	6.250	10.640	16.220	16.480	11.850
FS	5.850	8.110	4.760	5.800	5.990	4.520
FO	2.910	-	6.470	6.570	6.310	8.830
FA	1.890	-	3.190	2.590	2.530	3.710
ILM	.470	.700	.400	.570	.550	.490
CHR	.150	.220	.120	.150	.130	.150
COR	-	-	-	-	-	-

	G3A2GG517A	G2A1CC068A	G3A2GG127A	A3A1AG126A	A3A5AG187A	A3A1AG127A
SIO2	44.70	46.04	45.00	45.17	43.88	46.37
TIO2	.32	.21	.38	.30	.38	.32
AL2O3	26.12	28.76	27.21	25.94	25.56	23.01
CR2O3	N.A.	.10	.12	.09	.09	.04
FEO	5.37	5.46	5.48	5.49	5.51	5.54
MGO	9.95	6.09	8.48	9.33	7.34	7.60
CAO	14.37	15.98	14.61	14.66	13.90	14.67
NA2O	N.A.	.29	.10	.06	.13	.40
K2O	N.A.	.01	.03	.02	.00	.09
TOTAL	100.82	102.94	101.42	101.06	96.79	98.05
QTZ	-	-	-	-	-	-
OR	-	.060	.180	.120	-	.530
AB	-	2.450	.850	.510	1.100	3.380
AN	71.270	77.150	72.480	70.450	68.960	60.730
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	.010	.890	-	.950	-	5.030
EN	11.350	8.590	11.380	11.980	13.740	16.900
FS	4.270	5.430	5.030	4.900	7.080	8.580
FO	9.410	4.610	6.820	7.890	3.180	1.420
FA	3.910	3.210	3.320	3.560	1.800	.790
ILM	.610	.400	.720	.570	.720	.610
CHR	-	.150	.180	.130	.130	.060
COR	-	-	.450	-	.070	-

TABLE 3. - CONTINUED

	G3A2GG330A	G3A2GG001A	G2A1AG140A	A3A4AG008A	A3A4AG102A	A3A4CC191A
SIO2	45.15	46.13	45.40	44.80	44.25	45.29
TIO2	.32	.35	.36	.31	.33	.22
AL2O3	25.82	25.83	25.79	26.08	26.07	28.09
CR2O3	.12	.12	.10	.11	.10	.10
FEO	5.55	5.69	5.70	5.75	5.81	5.82
MGO	9.79	9.04	8.33	9.46	9.31	7.47
CAO	14.44	13.89	14.55	14.64	14.52	15.29
NA2O	.06	.65	.08	.04	.04	.18
K2O	.01	.59	.00	.00	.00	.04
TOTAL	101.24	102.27	100.31	101.19	100.43	102.51
QTZ	-	-	-	-	-	-
OR	.060	3.490	-	-	-	.240
AB	.510	5.500	.680	.340	.340	1.520
AN	70.160	65.820	70.010	70.990	70.960	75.720
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	.620	1.290	.910	.690	.450	.060
EN	12.010	5.100	14.230	10.710	9.830	8.140
FS	4.710	2.210	6.710	4.520	4.260	4.480
FO	8.670	12.200	4.560	9.010	9.360	7.330
FA	3.750	5.830	2.370	4.190	4.470	4.450
ILM	.610	.660	.680	.590	.630	.420
CHR	.180	.180	.150	.160	.150	.150
COR	-	-	-	-	-	-

	G2A1AG102B	G3A2GG272A	G3A3AG059A	A3A1AG105A	G2A3AG068A	G2A1AG102A
SIO2	44.08	45.95	44.24	45.43	44.38	43.93
TIO2	.33	.34	.28	.36	.33	.32
AL2O3	25.43	26.42	26.23	26.13	24.89	25.61
CR2O3	.08	.13	.00	.07	.11	.08
FEO	5.86	5.87	5.90	5.97	6.02	6.08
MGO	10.13	7.19	9.17	8.08	8.84	10.26
CAO	14.37	15.07	14.51	14.59	14.46	14.34
NA2O	.03	.23	.01	.12	.05	.02
K2O	.00	.05	.09	.03	.00	.00
TOTAL	100.30	101.24	100.42	100.70	99.08	100.64
QTZ	-	-	-	-	-	-
OR	-	.300	.530	.180	-	-
AB	.250	1.950	.080	1.020	.420	.170
AN	69.260	70.910	71.260	70.670	67.690	69.790
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	.850	1.610	.300	.710	1.690	.560
EN	9.440	12.390	9.200	12.870	12.330	8.450
FS	3.800	6.990	4.180	6.590	5.830	3.490
FO	11.060	3.870	9.560	5.080	6.790	11.990
FA	4.900	2.400	4.780	2.870	3.540	5.460
ILM	.630	.650	.530	.680	.630	.610
CHR	.120	.190	-	.100	.160	.120
COR	-	-	-	-	-	-

TABLE 3. - CONTINUED

	G2A1AG029A	A3A2BG119A	G2A1GG011A	G3A2AG047A	G3A2GG006A	A3A5GG140A
SIO2	47.73	45.76	48.26	45.73	44.56	44.50
TIO2	.38	.79	.38	.43	.30	.34
AL2O3	23.70	23.65	24.22	26.36	25.99	24.49
CR2O3	.09	.11	.10	.11	.12	.09
FEO	6.12	6.21	6.24	6.54	6.54	6.55
MGO	8.32	10.01	8.45	9.36	9.43	9.12
CAO	13.20	12.41	12.95	13.82	14.22	14.30
NA2O	.14	.33	.12	.36	.06	.04
K2O	.13	.00	.13	.14	.01	.00
TOTAL	99.81	99.27	100.86	102.86	101.21	99.42
QTZ	1.330	-	1.830	-	-	-
OR	.770	-	.770	.830	.060	-
AB	1.180	2.790	1.020	3.050	.510	.340
AN	63.660	61.570	64.250	68.560	70.550	66.650
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	.760	-	-	-	-	1.790
EN	20.720	19.220	21.040	9.680	9.940	12.480
FS	10.530	7.710	10.740	4.650	4.830	6.260
FO	-	4.009	-	9.550	9.490	7.170
FA	-	1.770	-	5.060	5.080	3.960
ILM	.720	1.500	.720	.820	.570	.650
CHR	.130	.160	.150	.160	.180	.130
COR	-	.540	.340	.490	.030	-

	G2A1AG079A	G3A1GG134A	A1B2GG007A	G2A3AG042A	G2A3AG052A	G3A3AG074A
SIO2	42.98	44.42	44.54	47.93	45.62	47.55
TIO2	.53	.32	.34	1.11	.59	1.19
AL2O3	24.40	25.07	24.70	23.13	23.28	26.00
CR2O3	.09	.11	.12	.21	.14	.01
FEO	6.57	6.60	6.69	6.94	7.51	7.84
MGO	9.38	9.37	9.71	7.47	8.40	3.49
CAO	14.12	14.19	14.11	14.16	14.22	15.05
NA2O	.02	.04	.05	.42	.38	.60
K2O	.00	.00	.00	.38	.04	.15
TOTAL	98.09	100.12	100.26	101.75	100.18	101.87
QTZ	-	-	-	-	-	1.850
OR	-	-	-	2.250	.240	.890
AB	.170	.340	.420	3.550	3.220	5.080
AN	66.490	68.230	67.170	60.110	61.700	67.810
LU	-	-	-	-	-	-
NEPH	-	-	-	-	-	-
WO	1.490	.910	1.180	4.230	3.690	2.860
EN	9.460	11.290	11.600	18.280	12.670	8.690
FS	4.500	5.560	5.570	10.540	7.690	12.420
FO	9.740	8.440	8.820	.230	5.780	-
FA	5.110	4.580	4.670	.150	3.860	-
ILM	1.010	.610	.650	2.110	1.120	2.260
CHR	.130	.160	.180	.310	.210	.010
COR	-	-	-	-	-	-

TABLE 3. - CONTINUED

	G3A2AG179A	A3A3AG082A
SIO2	46.08	37.41
TIO2	.49	2.34
AL2O3	24.00	25.47
CR2O3	.17	.15
FEO	8.40	14.32
MGO	7.76	10.06
CAO	14.11	10.64
NA2O	.46	.29
K2O	.09	.10
TOTAL	101.55	100.77
QTZ	-	-
OR	.530	.590
AB	3.890	2.380
AN	63.160	52.790
LU	-	-
NEPH	-	.040
WO	2.860	-
EN	11.120	-
FS	8.320	-
FO	5.750	17.560
FA	4.740	17.220
ILM	.930	4.440
CHR	.250	.220
COR	-	5.540

TABLE 4. GLASS ANALYSES - IV. HIGHLAND ANORTHOSITE

	A1B2GG006A	A3A4CC244B	G2A1CC117A	A1B2GG006B	A3A4AG172A
SIO2	42.41	44.88	43.88	43.77	46.02
TIO2	.00	.01	.02	.02	.08
AL2O3	35.78	36.35	34.20	36.16	34.52
CR2O3	.00	.01	.02	.00	.00
FEO	.08	.09	.10	.11	.34
MGO	.01	.09	.07	.01	.15
CAO	19.31	19.60	19.90	18.96	17.89
NA2O	.27	.36	.32	.32	1.19
K2O	.00	.01	.02	.00	.07
TOTAL	97.86	101.40	98.55	99.36	100.26
QTZ	-	.550	.620	1.190	.070
OR	-	.060	.120	-	.410
AB	1.010	3.050	2.710	2.710	10.070
AN	95.800	97.240	91.830	94.060	88.650
LU	-	-	-	-	-
NEPH	.690	-	-	-	-
WO	-	-	2.880	-	.040
EN	-	.220	.170	.020	.370
FS	-	.140	.130	.170	.490
FO	.020	-	-	-	-
FA	.110	-	-	-	-
ILM	-	.020	.040	.040	.150
CHR	-	.010	.030	-	-
COR	.230	.110	-	1.160	-

	G2A1AG120A	G3A1AG097A	G3A2GG296A	A3A4AG175A	G2A1AG095A
SIO2	44.76	47.06	41.75	37.16	39.17
TIO2	.01	.00	.19	.20	.15
AL2O3	35.94	33.65	36.06	37.71	35.97
CR2O3	.00	.00	.06	.05	.02
FEO	.35	.67	.75	.77	.98
MGO	.27	.48	3.99	3.88	3.55
CAO	19.55	16.96	19.30	20.96	19.03
NA2O	.47	1.52	.01	.04	.01
K2O	.00	.62	.00	.01	.00
TOTAL	101.36	100.96	102.11	100.77	98.88
QTZ	-	-	-	-	-
OR	-	3.660	-	-	-
AB	3.750	10.610	-	-	-
AN	95.960	83.170	-	-	-
LU	-	-	-	-	-
NEPH	.120	1.220	-	-	-
WO	.430	.410	-	-	-
EN	.220	.200	-	-	-
FS	.200	.200	-	-	-
FO	.320	.700	-	-	-
FA	.330	.790	-	-	-
ILM	.020	-	-	-	-
CHR	-	-	-	-	-
COR	-	-	-	-	-

TABLE 4. - CONTINUED

	A3A4AG209A	A1B2CC004A	A2A0CC006A	G2A1AG020A
SIO2	38.30	44.32	44.45	41.55
TIO2	.12	.00	.10	.24
AL2O3	38.74	36.03	33.87	32.88
CR2O3	.02	.01	.02	.08
FEO	1.16	1.27	1.70	2.34
MGO	1.99	.88	1.60	7.02
CAO	21.98	18.96	18.78	17.95
NA2O	.13	.32	.30	.01
K2O	.00	.00	.01	.00
TOTAL	102.45	101.79	100.83	102.06
QTZ	-	-	-	-
OR	-	-	.060	-
AB	-	2.710	2.540	-
AN	-	94.060	91.050	-
LU	-	-	-	-
NEPH	-	-	-	-
WO	-	-	.890	-
EN	-	1.190	2.180	-
FS	-	1.260	1.610	-
FO	-	.700	1.270	-
FA	-	.820	1.030	-
ILM	-	-	.190	-
CHR	-	.010	.030	-
COR	-	1.030	-	-

	G2A1CG008A	G3A3AG014A
SIO2	44.12	44.75
TIO2	.04	.11
AL2O3	35.93	31.62
CR2O3	.05	.04
FEO	2.81	3.46
MGO	1.88	3.31
CAO	15.75	16.87
NA2O	.34	.35
K2O	.00	.00
TOTAL	100.92	100.51
QTZ	3.290	-
OR	-	-
AB	2.880	2.960
AN	78.140	83.690
LU	-	-
NEPH	-	-
WO	-	-
EN	4.680	5.750
FS	5.050	4.280
FO	-	1.740
FA	-	1.430
ILM	.080	.210
CHR	.070	.060
COR	6.740	.370

TABLE 5. GLASS ANALYSES - V. POTASSIC GRANITE

	G 3A2AG150B	G 3A2AG150A
SiO_2	78.37	76.77
TiO_2	N.A.	N.A.
Al_2O_3	11.04	11.47
Cr_2O_3	N.A.	N.A.
FeO	1.04	1.80
MgO	N.A.	N.A.
CaO	.93	1.08
Na_2O	.54	.43
K_2O	6.11	6.49
Total	98.03	97.04
QTZ	48.98	45.61
OR	36.11	38.35
AB	4.57	3.64
AN	4.61	5.36
WO	---	---
EN	---	---
FS	1.91	3.31
FO	---	---
FA	---	---
COR	1.85	.77

TABLE 6. PYROXENE ANALYSES - I. CAO LESS THAN 3.0

	G1H0LP002A	G3A3PP034A	A3A3AP046A
SIO2	53.66	53.18	53.80
TIO2	.62	.32	.15
AL2O3	.91	.93	.96
CR2O3	.34	.48	.50
FEO	14.09	15.96	19.37
MNO	.19	.24	.32
MGO	27.21	26.10	22.98
CAO	2.63	2.02	2.42
NA2O	.00	.01	.00
TOTAL	99.64	99.25	100.49
SI IV	1.944	1.949	1.975
AL IV	.039	.040	.025
AL VI	-	-	.017
CR VI	.010	.014	.015
TI VI	.017	.009	.004
FE VI	.427	.489	.595
MG VI	1.470	1.426	1.257
MN VI	.006	.008	.010
CA VI	.102	.079	.095
NA VI	-	.001	-
	-	-	-
WO	.051	.040	.049
EN	.735	.715	.646
FS	.214	.245	.305

TABLE 7. PYROXENE ANALYSES - II. CAO 3.0 TO 7.0

	G3A3PP061A	A1B1CP003B	A3A2PP138A	G3A2AP019A	A3A3AP056A	G1H0AP008A
SIO2	53.75	54.20	54.60	52.59	51.65	51.25
TIO2	.46	.44	.25	.43	.38	.30
AL2O3	1.35	1.10	1.53	2.18	2.04	1.73
CR2O3	.68	.00	.63	.68	.66	.65
FEO	14.19	14.47	15.76	16.08	18.24	18.78
MNO	.00	.55	.36	.35	.40	.32
MGO	22.80	24.01	22.80	21.51	19.28	20.14
CAO	5.09	5.23	4.69	6.76	6.40	6.21
NA2O	.00	.03	.00	.01	.04	.01
TOTAL	98.32	100.02	100.62	100.58	99.09	99.38
SI IV	1.982	1.971	1.979	1.929	1.943	1.929
AL IV	.018	.029	.021	.071	.057	.071
AL VI	.041	.018	.045	.024	.034	.005
CR VI	.020	-	.018	.020	.020	.019
TI VI	.013	.012	.007	.012	.011	.008
FE VI	.438	.440	.478	.493	.574	.591
MG VI	1.253	1.301	1.232	1.176	1.081	1.130
MN VI	-	.017	.011	.011	.013	.010
CA VI	.201	.204	.182	.266	.258	.250
NA VI	-	.002	-	.001	.003	.001
	-	-	-	-	-	-
WO	.106	.105	.096	.137	.135	.127
EN	.662	.669	.651	.608	.565	.573
FS	.231	.226	.253	.255	.300	.300

	A3A2AP099A	A3A2AP040A	A3A5AP116A	A3A3PP098A	G3A3PP069A	G3A1LP085A
SIO2	51.85	50.59	51.44	52.36	50.70	51.59
TIO2	1.32	.59	.38	.56	1.11	.90
AL2O3	1.84	2.67	1.56	1.30	1.59	1.12
CR2O3	.41	.10	.51	.48	.46	.30
FEO	19.08	19.19	20.33	20.37	20.65	20.93
MNO	.40	.36	.37	.43	.41	.36
MGO	18.34	18.05	19.18	19.49	18.00	18.71
CAO	6.67	6.37	4.66	5.36	6.53	5.59
NA2O	.00	.00	.01	.08	.02	.04
TOTAL	99.91	97.92	98.45	100.43	99.47	99.55
SI IV	1.942	1.934	1.957	1.955	1.927	1.952
AL IV	.058	.066	.043	.045	.071	.048
AL VI	.023	.054	.027	.012	-	.002
CR VI	.012	.003	.015	.014	.014	.009
TI VI	.037	.017	.011	.016	.032	.026
FE VI	.598	.613	.647	.636	.656	.662
MG VI	1.024	1.028	1.088	1.085	1.020	1.055
MN VI	.013	.012	.012	.014	.013	.012
CA VI	.268	.261	.190	.214	.266	.227
NA VI	-	-	.001	.006	.001	.003
	-	-	-	-	-	-
WO	.142	.137	.099	.111	.137	.117
EN	.542	.540	.565	.561	.525	.543
FS	.316	.322	.336	.329	.338	.341

TABLE 7. CONTINUED

	G2A1AP014A	A3A5AP003A	A3A4AP105A	A3A4AP073C	A3A4AP110A	G3A3AP055A
SIO2	51.00	51.79	50.86	51.37	50.60	49.55
TIO2	.39	.47	1.39	.68	1.19	1.38
AL2O3	1.42	1.00	1.95	.88	1.81	1.92
CR2O3	.52	.39	.31	.17	.22	.25
FEO	21.14	21.61	22.14	22.19	22.36	23.28
MNO	.42	.39	.39	.44	.43	.42
MGO	17.76	17.18	16.98	17.47	17.60	15.54
CAO	6.99	6.54	6.03	4.99	5.20	6.84
NA2O	.00	.01	.02	.04	.07	.01
TOTAL	99.64	99.39	100.08	98.23	99.47	99.21
SI IV	1.940	1.972	1.928	1.977	1.929	1.916
AL IV	.060	.028	.072	.023	.071	.084
AL VI	.004	.017	.015	.017	.010	.003
CR VI	.016	.012	.009	.005	.007	.008
TI VI	.011	.014	.040	.020	.034	.040
FE VI	.673	.688	.702	.714	.713	.753
MG VI	1.007	.975	.959	1.002	1.000	.896
MN VI	.014	.013	.012	.014	.014	.014
CA VI	.285	.267	.245	.206	.212	.283
NA VI	-	.001	.001	.003	.005	.001
WO	.145	.138	.128	.107	.110	.147
EN	.513	.505	.503	.521	.519	.464
FS	.342	.357	.368	.372	.370	.390

	A3A4LP101A	G1B0LP002B	G3A3AP026B	G1H0AP024A	G3A2LP030A	A3A2AP053A
SIO2	50.44	49.16	50.44	50.04	51.01	49.94
TIO2	1.11	1.45	1.64	.83	.93	.45
AL2O3	1.48	1.91	2.12	.93	.90	1.23
CR2O3	.20	.39	.28	.16	.20	.29
FEO	23.58	24.66	25.12	25.51	25.95	26.28
MNO	.46	.71	.34	.46	.45	.41
MGO	15.19	15.00	16.14	14.61	15.01	12.61
CAO	6.77	6.44	4.98	6.60	6.23	6.81
NA2O	.03	.14	.07	.03	.06	.00
TOTAL	99.26	99.86	101.13	99.20	100.74	98.02
SI IV	1.947	1.904	1.913	1.953	1.957	1.978
AL IV	.053	.087	.087	.043	.041	.022
AL VI	.014	-	.008	-	-	.035
CR VI	.006	.012	.008	.005	.006	.009
TI VI	.032	.042	.047	.024	.027	.013
FE VI	.761	.799	.797	.833	.832	.871
MG VI	.874	.866	.913	.850	.858	.744
MN VI	.015	.023	.011	.015	.015	.014
CA VI	.280	.267	.202	.276	.256	.289
NA VI	.002	.010	.005	.002	.004	-
WO	.146	.138	.106	.141	.132	.152
EN	.456	.448	.477	.434	.441	.391
FS	.397	.413	.417	.425	.428	.457

TABLE 7. CONTINUED

	G3A2PP092A	A3A1AP057A	G2A1LP101A	A3A4AP162A	A3A2LP094A	A3A3LP140A
SIO2	50.73	50.34	49.90	49.80	49.67	48.35
TIO2	.76	1.19	1.16	.92	1.27	1.26
AL203	.68	1.69	1.58	1.05	1.73	1.86
CR203	.14	.19	.17	.14	.09	.18
FEO	26.87	27.01	27.05	28.15	28.59	28.60
MNO	.50	.47	.49	.44	.50	.49
MGO	14.84	15.01	14.98	12.36	12.22	13.01
CAO	5.59	5.14	4.79	6.95	5.52	5.21
NA2O	.15	.06	.02	.05	.00	.08
TOTAL	100.27	101.10	100.13	99.86	99.60	99.04
SI IV	1.962	1.929	1.931	1.955	1.949	1.915
AL IV	.031	.071	.069	.045	.051	.085
AL VI	-	.005	.003	.004	.029	.002
CR VI	.004	.006	.005	.004	.003	.006
TI VI	.022	.034	.034	.027	.038	.038
FE VI	.869	.865	.875	.924	.938	.947
MG VI	.856	.857	.864	.723	.715	.768
MN VI	.016	.015	.016	.015	.017	.016
CA VI	.232	.211	.199	.292	.232	.221
NA VI	.011	.004	.001	.004	-	.006
	-	-	-	-	-	-
WO	.118	.109	.102	.151	.123	.114
EN	.437	.443	.446	.373	.379	.397
FS	.444	.448	.452	.476	.498	.489

	G3A2LP012A	G3A2LP207B	G3A2AP005B	G3A2AP075A	G3A1LP034A	G3A2LP013A
SIO2	48.82	49.61	48.91	49.18	44.75	47.52
TIO2	1.33	1.57	.68	.64	4.75	.69
AL203	1.69	2.05	.80	.68	4.53	.59
CR203	.18	.07	.12	.11	.13	.08
FEO	28.93	29.94	32.85	33.31	37.55	38.59
MNO	.51	.50	.52	.56	.40	.64
MGO	12.68	11.85	11.19	8.74	1.51	5.29
CAO	5.93	6.38	5.77	6.70	6.08	6.34
NA2O	.01	.00	.00	.01	.04	.01
TOTAL	100.08	101.97	100.83	99.93	99.74	99.76
SI IV	1.918	1.917	1.941	1.978	1.847	1.970
AL IV	.078	.083	.037	.022	.153	.029
AL VI	-	.011	-	.010	.068	-
CR VI	.006	.002	.004	.004	.004	.003
TI VI	.039	.046	.020	.019	.147	.022
FE VI	.951	.968	1.090	1.120	1.296	1.338
MG VI	.742	.683	.662	.524	.093	.327
MN VI	.017	.016	.018	.019	.014	.022
CA VI	.250	.264	.245	.289	.269	.282
NA VI	.001	-	-	.001	.003	.001
	-	-	-	-	-	-
WO	.128	.138	.123	.149	.162	.145
EN	.382	.357	.331	.271	.056	.168
FS	.489	.505	.546	.580	.782	.687

TABLE 7. CONTINUED

	G2A1LP037B
SIO2	48.32
TIO2	1.29
AL2O3	1.61
CR2O3	.12
FEO	39.03
MNO	.53
MGO	4.82
CAO	6.53
NA2O	.02
TOTAL	102.26
SI IV	1.948
AL IV	.052
AL VI	.024
CR VI	.004
TI VI	.039
FE VI	1.316
MG VI	.290
MN VI	.018
CA VI	.282
NA VI	.002
WO	.149
EN	.153
FS	.697

TABLE 8. PYROXENE ANALYSES - III. CAO GREATER THAN 7.0

	A3A1AP072A	G1H0AP003A	G3A2LP142B	G3A2LP010B	A3A5PP011A	A3A3AP040A
SIO2	48.31	48.65	47.52	48.21	48.18	52.85
TIO2	3.37	2.70	3.83	3.11	3.02	.34
AL2O3	4.22	3.66	4.21	3.84	3.70	1.46
CR2O3	.43	.65	.40	.56	.63	.52
FEO	3.31	11.62	12.03	12.12	12.33	12.52
MNO	.27	.22	.29	.25	.26	.30
MGO	12.11	13.82	11.70	13.14	12.92	16.77
CAO	18.15	17.73	19.71	17.88	17.54	15.09
NA2O	.10	.07	.08	.07	.09	.02
TOTAL	100.28	99.13	99.78	99.20	98.69	99.88
SI IV	1.929	1.846	1.809	1.834	1.843	1.966
AL IV	.071	.155	.189	.166	.157	.034
AL VI	.128	.009	-	.006	.010	.030
CR VI	.014	.019	.012	.017	.019	.015
TI VI	.101	.077	.110	.089	.087	.010
FE VI	.111	.369	.383	.386	.394	.389
MG VI	.721	.781	.664	.745	.737	.930
MN VI	.009	.007	.009	.008	.008	.010
CA VI	.777	.721	.804	.729	.719	.601
NA VI	.008	.005	.006	.005	.007	.001
WO	.483	.385	.434	.392	.389	.313
EN	.448	.418	.359	.401	.398	.484
FS	.069	.197	.207	.207	.213	.203

	G1H0LP002B	G3A2PP016A	A3A5PP011B	A3A5PP011C	G3A1LP006A	A3A4PP096A
SIO2	51.10	48.69	48.56	48.25	47.13	48.34
TIO2	.70	2.80	3.16	3.10	3.70	3.20
AL2O3	1.74	3.62	3.70	3.68	4.33	3.71
CR2O3	.54	.47	.54	.55	.32	.40
FEO	12.62	12.74	12.84	12.86	12.88	13.06
MNO	.25	.29	.34	.30	.31	.27
MGO	16.70	12.60	13.36	13.32	12.16	12.21
CAO	15.19	18.51	16.93	16.98	17.29	17.70
NA2O	.02	.09	.05	.07	.06	.11
TOTAL	98.85	99.82	99.48	99.12	98.18	98.99
SI IV	1.929	1.847	1.842	1.839	1.817	1.848
AL IV	.071	.153	.158	.161	.183	.152
AL VI	.007	.009	.007	.004	.014	.015
CR VI	.016	.014	.016	.017	.010	.012
TI VI	.020	.080	.090	.089	.107	.092
FE VI	.398	.404	.407	.410	.415	.418
MG VI	.940	.712	.755	.757	.699	.696
MN VI	.008	.009	.011	.010	.010	.009
CA VI	.615	.752	.688	.693	.714	.725
NA VI	.001	.007	.004	.005	.004	.008
WO	.315	.403	.372	.373	.391	.394
EN	.481	.381	.408	.407	.382	.378
FS	.204	.216	.220	.220	.227	.227

TABLE 8. CONTINUED

	G3A1PP116A	A3A2PP131A	G3A2LP077B	G1B0LP003E	A3A3LP077A	A3A5LP079A
SIO2	49.65	48.75	47.85	48.04	46.98	47.36
TIO2	1.40	2.62	3.25	2.97	3.38	2.68
AL203	3.49	3.33	3.26	3.56	4.19	3.28
CR203	.91	.39	.44	.35	.47	.44
FEO	13.06	13.10	13.13	13.16	13.17	13.21
MNO	.26	.35	.28	.29	.28	.27
MGO	13.73	12.65	12.76	12.04	12.71	12.45
CAO	17.00	16.66	17.63	18.86	16.94	16.42
NA2O	.03	.05	.03	.07	.15	.08
TOTAL	99.52	97.90	98.69	99.46	98.27	96.21
SI IV	1.879	1.877	1.840	1.838	1.813	1.862
AL IV	.121	.123	.148	.160	.187	.138
AL VI	.035	.029	-	-	.003	.015
CR VI	.027	.012	.013	.011	.014	.014
TI VI	.040	.076	.094	.085	.098	.079
FE VI	.413	.422	.422	.421	.425	.434
MG VI	.775	.726	.731	.686	.731	.730
MN VI	.008	.011	.009	.009	.009	.009
CA VI	.689	.687	.726	.777	.700	.692
NA VI	.002	.004	.006	.005	.011	.006
WO	.367	.375	.386	.412	.377	.373
EN	.413	.396	.389	.364	.394	.393
FS	.220	.230	.225	.223	.229	.234

	A1B1CP003A	A3A2PP089A	A3A3AP033A	G1H0AP011A	G3A2LP161A	G3A2LP142A
SIO2	54.02	46.16	51.60	45.58	48.55	47.58
TIO2	.44	4.01	.58	4.19	2.58	3.48
AL203	1.23	5.34	1.42	5.34	3.18	3.82
CR203	.01	.36	.50	.42	.42	.46
FEO	13.24	13.40	13.40	13.44	13.62	13.78
MNO	.57	.28	.29	.26	.31	.25
MGO	23.25	10.88	12.75	10.80	12.39	12.29
CAO	7.48	16.97	18.88	18.46	18.47	17.89
NA2O	.04	.05	.08	.10	.08	.08
TOTAL	100.28	97.45	99.51	98.59	99.61	99.63
SI IV	1.963	1.797	1.960	1.766	1.854	1.818
AL IV	.037	.203	.040	.234	.143	.172
AL VI	.015	.042	.024	.010	-	-
CR VI	-	.011	.015	.013	.013	.014
TI VI	.012	.117	.017	.122	.074	.100
FE VI	.402	.436	.426	.436	.435	.440
MG VI	1.259	.631	.722	.624	.705	.700
MN VI	.018	.009	.009	.008	.010	.008
CA VI	.291	.708	.769	.766	.756	.733
NA VI	.003	.004	.006	.008	.006	.006
WO	.149	.399	.401	.420	.399	.391
EN	.645	.356	.377	.342	.372	.374
FS	.206	.246	.222	.239	.229	.235

TABLE 8. CONTINUED

	G3A2LP020A	G3A3PP048A	A3A2AP123A	G3A3PP043B	G3A2LP077A	A3A3LP111A
SIO2	48.56	46.87	50.33	48.04	48.25	49.81
TIO2	2.53	3.29	2.39	3.10	3.00	1.59
AL203	3.09	4.00	3.00	4.28	3.32	1.94
CR203	.30	.35	.35	.39	.37	.35
FEO	13.89	13.99	14.01	14.01	14.02	14.05
MNO	.40	.33	.41	.25	.31	.31
MGO	12.13	11.46	14.36	13.23	12.71	14.00
CAO	17.71	18.01	13.30	15.96	17.25	14.27
NA2O	.04	.07	.01	.13	.06	.08
TOTAL	98.66	98.38	98.16	99.39	99.31	96.40
SI IV	1.870	1.819	1.915	1.828	1.846	1.939
AL IV	.130	.181	.085	.172	.150	.061
AL VI	.010	.002	.049	.020	-	.028
CR VI	.009	.011	.010	.012	.011	.011
TI VI	.073	.096	.068	.089	.086	.047
FE VI	.447	.454	.446	.446	.449	.457
MG VI	.696	.663	.814	.751	.725	.813
MN VI	.013	.011	.013	.008	.010	.010
CA VI	.731	.749	.542	.651	.707	.595
NA VI	.003	.005	.001	.010	.004	.006
	-	-	-	-	-	-
WO	.390	.401	.301	.352	.376	.319
EN	.371	.355	.452	.406	.385	.436
FS	.239	.243	.247	.241	.239	.245

	A3A1LP045A	A3A2PP085A	G1B0LP003A	G2A1AP097A	A3A1LP060G	A3A2AP060A
SIO2	49.22	53.76	47.53	48.44	47.75	48.94
TIO2	2.32	.25	3.18	3.11	3.31	1.51
AL203	3.09	2.11	3.89	3.68	4.46	3.60
CR203	.30	.70	.35	.47	.24	.79
FEO	14.13	14.25	14.35	14.44	14.46	14.59
MNO	.25	.32	.31	.29	.33	.37
MGO	12.73	20.15	11.91	13.62	10.89	14.33
CAO	18.14	8.49	17.86	15.92	18.49	13.40
NA2O	.09	.00	.09	.10	.05	.01
TOTAL	100.28	100.05	99.48	100.06	99.98	97.54
SI IV	1.866	1.970	1.824	1.835	1.824	1.886
AL IV	.134	.031	.176	.164	.176	.114
AL VI	.004	.061	-	-	.024	.049
CR VI	.009	.020	.011	.014	.007	.024
TI VI	.066	.007	.092	.089	.095	.044
FE VI	.448	.437	.461	.457	.462	.470
MG VI	.719	1.100	.691	.769	.620	.823
MN VI	.008	.010	.010	.009	.011	.012
CA VI	.737	.333	.734	.646	.757	.553
NA VI	.007	-	.007	.007	.004	.001
	-	-	-	-	-	-
WO	.387	.178	.391	.345	.412	.300
EN	.378	.568	.363	.411	.337	.446
FS	.235	.233	.245	.244	.251	.255

TABLE 8. CONTINUED

	G1B0LP007D	A3A1AP019A	G3A3AP027A	G3A1AP112A	A3A1LP045D	G1B0LP004B
SIO2	49.98	48.43	50.33	48.58	48.61	48.78
TIO2	1.46	2.96	1.29	2.51	3.09	2.23
AL2O3	1.63	3.80	2.91	3.47	3.75	2.58
CR2O3	.34	.19	.71	.31	.42	.43
FEO	14.61	14.63	14.69	14.75	14.78	14.87
MNO	.36	.24	.00	.37	.33	.29
MGO	15.04	14.72	13.92	12.19	13.90	14.18
CAO	15.71	14.42	14.63	14.94	15.21	14.93
NA2O	.03	.31	.15	.04	.09	.06
TOTAL	99.17	99.69	98.64	97.17	100.19	98.37
SI IV	1.907	1.835	1.918	1.889	1.837	1.878
AL IV	.073	.165	.082	.111	.163	.117
AL VI	-	.004	.049	.048	.004	-
CR VI	.010	.006	.021	.010	.013	.013
TI VI	.042	.084	.037	.073	.088	.065
FE VI	.466	.464	.468	.480	.467	.479
MG VI	.855	.831	.791	.707	.783	.814
MN VI	.012	.008	-	.012	.011	.010
CA VI	.642	.585	.597	.622	.616	.616
NA VI	.002	.023	.011	.003	.007	.004
	-	-	-	-	-	-
WO	.327	.311	.322	.344	.330	.323
EN	.436	.442	.426	.391	.420	.426
FS	.237	.247	.252	.265	.250	.251

	A3A1AP059A	G3A1PP138A	G1H0AP025A	G1B0LP004A	A3A1LP060H	G3A3AP067A
SIO2	46.53	48.61	45.75	48.55	47.47	48.70
TIO2	4.56	2.50	4.40	2.64	3.82	1.89
AL2O3	5.16	3.27	5.20	3.51	4.45	2.76
CR2O3	.27	.41	.21	.36	.24	.23
FEO	14.93	14.97	14.97	15.00	15.07	15.13
MNO	.30	.30	.34	.33	.22	.36
MGO	10.03	13.57	8.60	13.54	10.72	11.56
CAO	18.79	15.46	16.75	16.24	17.80	17.96
NA2O	.11	.06	.07	.06	.04	.08
TOTAL	100.68	99.17	96.29	100.23	99.83	98.65
SI IV	1.775	1.859	1.816	1.842	1.817	1.886
AL IV	.225	.141	.184	.157	.183	.114
AL VI	.007	.007	.059	-	.018	.012
CR VI	.008	.012	.007	.011	.007	.007
TI VI	.131	.072	.131	.075	.110	.055
FE VI	.476	.479	.497	.476	.483	.490
MG VI	.570	.774	.509	.766	.612	.667
MN VI	.010	.010	.011	.011	.007	.012
CA VI	.768	.634	.712	.660	.730	.745
NA VI	.008	.004	.005	.004	.003	.006
	-	-	-	-	-	-
WO	.423	.336	.415	.347	.400	.392
EN	.314	.410	.296	.403	.335	.351
FS	.262	.254	.289	.250	.264	.258

TABLE 8. CONTINUED

	G3A2LP029A	A3A2LP159A	G3A1PP012A	A3A3PP123A	G2A1LP060A	A3A2AP121A
SIO2	48.98	49.87	48.35	49.47	50.07	48.11
TIO2	3.03	2.18	1.33	2.50	1.63	2.59
AL203	3.18	2.86	2.24	3.28	1.88	3.32
CR203	.29	.33	.40	.50	.32	.23
FEO	15.16	15.18	15.18	15.19	15.19	15.30
MNO	.30	.41	.29	.34	.33	.42
MGO	12.33	12.72	11.65	14.77	13.07	11.08
CAO	16.85	15.25	16.91	13.83	17.24	16.04
NA20	.06	.02	.05	.07	.05	.02
TOTAL	100.19	98.83	96.41	99.95	99.79	97.11
SI IV	1.861	1.908	1.914	1.867	1.910	1.885
AL IV	.139	.092	.087	.133	.084	.115
AL VI	.004	.037	.018	.013	-	.038
CR VI	.009	.010	.012	.015	.010	.007
TI VI	.087	.063	.040	.071	.047	.076
FE VI	.482	.486	.502	.479	.485	.501
MG VI	.698	.725	.687	.831	.743	.647
MN VI	.010	.013	.010	.011	.011	.014
CA VI	.686	.625	.717	.559	.705	.673
NA VI	.004	.001	.004	.005	.004	.001
	-	-	-	-	-	-
WO	.368	.340	.376	.299	.365	.370
EN	.374	.395	.360	.444	.385	.355
FS	.258	.265	.264	.256	.251	.275

	G3A3AP016A	G1B0LP007A	G3A3LP080A	G1B0LP003F	A3A5PP215A	A3A5AP058A
SIO2	49.70	49.09	46.40	48.37	46.06	49.37
TIO2	1.73	2.13	4.19	2.95	3.92	1.89
AL203	2.16	2.83	4.77	3.60	4.75	2.36
CR203	.41	.41	.36	.35	.39	N.A.
FEO	15.31	15.44	15.49	15.50	15.80	15.81
MNO	.31	.29	.34	.29	.31	N.A.
MGO	15.94	13.43	11.85	13.07	10.68	13.16
CAO	13.12	15.99	15.82	15.80	16.71	15.72
NA20	.08	.07	.08	.07	.08	N.A.
TOTAL	98.77	99.69	99.30	100.00	98.70	98.30
SI IV	1.896	1.873	1.786	1.841	1.792	1.906
AL IV	.097	.127	.214	.159	.208	.094
AL VI	-	-	.002	.003	.009	.013
CR VI	.012	.012	.011	.010	.012	-
TI VI	.050	.061	.121	.084	.115	.055
FE VI	.489	.493	.499	.493	.514	.510
MG VI	.906	.764	.680	.741	.619	.757
MN VI	.010	.009	.011	.009	.010	-
CA VI	.536	.654	.652	.644	.696	.650
NA VI	.006	.005	.006	.005	.006	-
	-	-	-	-	-	-
WO	.278	.342	.356	.343	.381	.339
EN	.469	.400	.371	.395	.338	.395
FS	.253	.258	.272	.263	.281	.266

TABLE 8. CONTINUED

	G1B0LP003B	A3A3AP106B	G2A1PP141A	G3A3PP043A	G2A1LP142A	G3A1LP109A
SIO2	47.83	48.08	49.21	49.17	48.52	50.25
TIO2	3.17	3.03	2.81	2.05	2.92	1.65
AL203	3.92	3.83	3.63	2.62	3.08	1.85
CR203	.35	.25	.33	.31	.20	.54
FEO	15.83	15.91	15.99	16.00	16.01	16.04
MNO	.31	.34	.35	.34	.28	.18
MGO	13.29	10.87	16.04	13.54	11.46	16.08
CAO	15.25	16.36	12.38	15.20	17.44	12.15
NA2O	.09	.06	.05	.07	.08	.07
TOTAL	100.05	98.74	100.81	99.31	99.99	98.81
SI IV	1.822	1.859	1.841	1.884	1.859	1.914
AL IV	.176	.141	.159	.116	.139	.083
AL VI	-	.034	.001	.002	-	-
CR VI	.010	.008	.010	.009	.006	.016
TI VI	.091	.088	.079	.059	.084	.047
FE VI	.504	.514	.500	.513	.513	.511
MG VI	.755	.627	.895	.773	.655	.913
MN VI	.010	.011	.011	.011	.009	.006
CA VI	.622	.678	.496	.624	.716	.496
NA VI	.007	.004	.004	.005	.006	.005
	-	-	-	-	-	-
WO	.331	.373	.262	.327	.380	.258
EN	.401	.344	.473	.405	.347	.476
FS	.268	.283	.265	.268	.272	.266

	G3A2LP161B	A3A5AP209A	G3A2LP177A	G3A3LP047A	A3A4AP060A	G1B0LP001A
SIO2	48.99	50.46	49.56	45.63	46.45	48.34
TIO2	2.41	.61	1.97	4.14	3.19	1.78
AL203	3.08	1.96	1.84	4.58	4.93	2.33
CR203	.38	.67	.42	.48	.26	.47
FEO	16.08	16.09	16.13	16.18	16.21	16.23
MNO	.35	.38	.33	.33	.33	.62
MGO	13.15	19.52	13.72	9.49	9.88	12.60
CAO	15.58	7.74	14.75	17.95	17.19	16.06
NA2O	.06	.00	.06	.08	.07	.15
TOTAL	100.09	97.41	98.77	98.86	98.51	98.57
SI IV	1.865	1.925	1.907	1.785	1.812	1.880
AL IV	.135	.075	.083	.211	.188	.107
AL VI	.003	.013	-	-	.039	-
CR VI	.011	.020	.013	.015	.008	.015
TI VI	.069	.018	.057	.122	.094	.052
FE VI	.512	.513	.519	.529	.529	.528
MG VI	.746	1.110	.787	.553	.575	.730
MN VI	.011	.012	.011	.011	.011	.020
CA VI	.635	.316	.608	.752	.719	.669
NA VI	.004	-	.004	.006	.005	.011
	-	-	-	-	-	-
WO	.336	.163	.318	.410	.394	.347
EN	.394	.572	.411	.302	.315	.379
FS	.270	.265	.271	.288	.290	.274

TABLE 8. CONTINUED

	G1B0LP003G	G3A2LP152B	A3A4LP052A	A3A1LP060I	G3A3AP081A	A3A2PP128A
SIO2	48.69	49.18	49.84	48.05	50.39	46.27
TIO2	2.57	2.57	1.95	3.51	.39	4.10
AL2O3	3.19	3.12	2.62	4.20	2.50	5.46
CR2O3	.32	.41	.47	.23	.17	.33
FEO	16.28	16.40	16.43	16.43	16.58	16.58
MNO	.33	.36	.32	.25	.50	.32
MGO	12.59	14.01	14.88	11.02	14.21	10.87
CAO	16.06	14.40	12.97	17.06	13.83	15.21
NA2O	.06	.07	.04	.08	.05	.04
TOTAL	100.10	100.53	99.52	100.83	98.63	99.19
SI IV	1.859	1.860	1.894	1.827	1.934	1.786
AL IV	.141	.139	.107	.173	.066	.214
AL VI	.002	-	.011	.015	.047	.035
CR VI	.010	.012	.014	.007	.005	.010
TI VI	.074	.073	.056	.100	.011	.119
FE VI	.520	.519	.522	.522	.532	.535
MG VI	.716	.790	.843	.624	.813	.626
MN VI	.011	.012	.010	.008	.016	.010
CA VI	.657	.584	.528	.695	.569	.629
NA VI	.004	.005	.003	.006	.004	.003
WO	.347	.308	.279	.377	.297	.351
EN	.378	.417	.445	.339	.425	.349
FS	.275	.274	.276	.284	.278	.299

	G3A2LP231A	G3A2LP010A	A3A4AP083A	A3A2PP003A	G1H0LP005A	G2A1LP115A
SIO2	47.05	49.64	51.90	48.82	43.86	48.52
TIO2	3.76	1.90	.40	2.54	5.59	2.42
AL2O3	4.51	2.37	2.29	3.12	7.47	2.85
CR2O3	.35	.34	.62	.49	.37	.35
FEO	16.59	16.60	16.61	16.72	16.72	16.74
MNO	.35	.31	.36	.59	.31	.31
MGO	11.42	11.82	19.43	14.03	12.05	11.89
CAO	16.29	16.92	8.16	11.69	13.03	16.42
NA2O	.08	.06	.01	.14	.05	.08
TOTAL	100.40	99.86	99.76	98.15	99.45	99.59
SI IV	1.800	1.901	1.933	1.882	1.687	1.869
AL IV	.200	.099	.067	.118	.313	.129
AL VI	.003	.008	.034	.024	.026	-
CR VI	.011	.010	.018	.015	.011	.011
TI VI	.108	.055	.011	.074	.162	.070
FE VI	.531	.532	.517	.539	.538	.539
MG VI	.651	.675	1.079	.806	.691	.683
MN VI	.011	.010	.011	.019	.010	.010
CA VI	.668	.694	.326	.483	.537	.678
NA VI	.006	.004	.001	.010	.004	.006
WO	.361	.365	.169	.264	.304	.357
EN	.352	.355	.561	.441	.391	.359
FS	.287	.280	.269	.295	.305	.284

TABLE 8. CONTINUED

	A3A2PP148A	G3A2LP224A	G1B0LP002C	A3A5AP112A	G1B0LP006B	A3A4LP161A
SIO2	49.50	46.77	48.18	47.26	49.35	47.17
TIO2	2.92	3.37	2.48	2.63	1.74	3.34
AL203	3.78	4.19	3.98	2.62	2.29	3.88
CR203	.36	.34	.44	.15	.31	.21
FEO	16.75	16.77	16.81	16.65	16.91	16.91
MNO	.38	.33	.59	.34	.33	.33
MGO	14.95	10.78	11.90	10.15	13.92	9.56
CAO	11.39	16.96	15.82	16.97	14.11	17.41
NA2O	.02	.09	.15	.05	.05	.09
TOTAL	100.02	99.60	100.36	97.01	99.01	98.91
SI IV	1.884	1.810	1.841	1.878	1.897	1.839
AL IV	.136	.190	.159	.122	.103	.161
AL VI	.032	.001	.020	-	.001	.018
CR VI	.011	.010	.013	.005	.009	.007
TI VI	.083	.093	.071	.079	.050	.098
FE VI	.527	.543	.537	.560	.544	.551
MG VI	.839	.622	.678	.601	.798	.556
MN VI	.012	.011	.019	.011	.011	.011
CA VI	.459	.703	.640	.722	.581	.727
NA VI	.001	.006	.011	.004	.004	.007
WO	.252	.376	.348	.384	.302	.397
EN	.460	.333	.364	.319	.415	.303
FS	.289	.291	.288	.297	.283	.301

	A3A3AP007A	G3A3PP048B	A3A1LP060D	A3A3LP137A	G3A1LP042A	A3A1LP060F
SIO2	49.23	47.17	47.69	49.39	46.50	49.24
TIO2	1.80	3.27	3.71	2.19	3.45	1.87
AL203	2.19	4.04	4.38	2.81	4.17	1.70
CR203	.24	.35	.24	.40	.23	.25
FEO	16.96	17.02	17.08	17.09	17.15	17.16
MNO	.36	.33	.25	.35	.32	.30
MGO	13.20	12.07	11.41	12.44	11.38	11.00
CAO	14.69	15.19	16.07	15.16	15.08	18.15
NA2O	.31	.08	.05	.08	.05	.07
TOTAL	98.99	99.52	100.86	99.89	98.31	99.74
SI IV	1.899	1.818	1.814	1.888	1.817	1.905
AL IV	.100	.182	.186	.112	.183	.077
AL VI	-	.002	.010	.015	.008	-
CR VI	.007	.011	.007	.012	.007	.008
TI VI	.052	.095	.106	.063	.101	.054
FE VI	.547	.549	.543	.546	.560	.555
MG VI	.759	.693	.647	.709	.663	.634
MN VI	.012	.011	.008	.011	.011	.010
CA VI	.607	.627	.655	.621	.630	.752
NA VI	.023	.006	.004	.006	.004	.005
WO	.317	.336	.355	.331	.340	.387
EN	.397	.371	.351	.378	.358	.327
FS	.286	.293	.294	.291	.302	.286

TABLE 8. CONTINUED

	G2A1LP072A	A3A4PP070A	A3A4AP014A	A3A4LP127A	A3A2PP032A	A3A3PP042A
SIO2	46.77	49.72	49.23	49.29	49.31	47.33
TIO2	3.97	1.98	2.25	2.01	1.36	1.29
AL2O3	4.03	2.63	2.78	2.68	1.75	12.61
CR2O3	.17	.40	.24	.36	.59	.51
FEO	17.17	17.18	17.24	17.30	17.31	17.36
MNO	.34	.39	.40	.36	.34	.29
MGO	10.36	14.54	13.70	13.39	16.94	6.62
CAO	16.36	12.25	13.83	13.97	9.17	12.07
NA2O	.07	.05	.04	.05	.01	.32
TOTAL	99.21	99.14	99.72	99.42	96.78	98.40
SI IV	1.816	1.899	1.881	1.890	1.917	1.804
AL IV	.184	.101	.120	.111	.080	.195
AL VI	.001	.018	.006	.011	-	.371
CR VI	.005	.012	.007	.011	.018	.015
TI VI	.116	.057	.065	.058	.040	.037
FE VI	.558	.549	.551	.555	.563	.553
MG VI	.600	.828	.780	.765	.982	.376
MN VI	.011	.013	.013	.012	.011	.009
CA VI	.681	.501	.566	.574	.382	.493
NA VI	.005	.004	.003	.004	.001	.024
WO	.370	.267	.298	.303	.198	.347
EN	.326	.441	.411	.404	.510	.264
FS	.303	.292	.290	.293	.292	.389

	A3A2LP037A	A3A1LP028A	A3A5LP120A	A3A1LP060E	G2A1LP085B	G1H0AP012A
SIO2	47.26	49.09	48.74	47.84	48.53	48.24
TIO2	2.80	1.82	2.47	2.98	1.84	1.81
AL2O3	4.48	7.63	3.16	3.48	2.49	2.43
CR2O3	.32	.24	.43	.26	.30	.33
FEO	17.38	17.46	17.49	17.49	17.53	17.58
MNO	.32	.41	.37	.24	.40	.33
MGO	9.96	7.44	12.40	11.34	10.25	12.82
CAO	16.34	14.81	12.49	16.26	16.74	15.51
NA2O	.11	.06	.04	.04	.04	.15
TOTAL	98.98	98.98	97.59	99.93	98.12	99.20
SI IV	1.838	1.880	1.897	1.842	1.905	1.870
AL IV	.162	.120	.103	.158	.095	.111
AL VI	.043	.225	.042	-	.020	-
CR VI	.010	.007	.013	.008	.009	.010
TI VI	.082	.052	.072	.086	.054	.053
FE VI	.565	.559	.569	.563	.575	.570
MG VI	.577	.425	.719	.651	.600	.741
MN VI	.010	.013	.012	.008	.013	.011
CA VI	.681	.608	.521	.671	.704	.644
NA VI	.008	.004	.003	.003	.003	.011
WO	.373	.382	.288	.356	.375	.330
EN	.317	.267	.398	.345	.319	.379
FS	.310	.351	.315	.299	.306	.292

TABLE 8. CONTINUED

	G3A3AP019A	G1H0LP014A	G2A1LP044A	A3A4LP075A	G3A2PP081A	A3A4LP010B
SIO2	49.48	48.08	46.78	47.81	49.39	50.32
TIO2	1.78	2.69	2.84	2.34	1.59	1.39
AL203	1.97	3.34	3.70	2.38	2.19	1.82
CR203	.32	.22	.21	.28	.35	.31
FEO	17.59	17.64	17.68	17.72	17.73	17.80
MNO	.00	.35	.36	.35	.36	.36
MGO	14.26	11.53	8.18	9.23	13.92	14.11
CAO	15.85	16.11	17.23	17.32	13.26	13.71
NA2O	.20	.04	.07	.04	.06	.04
TOTAL	101.46	100.00	97.05	97.49	98.66	99.85
SI IV	1.871	1.850	1.866	1.898	1.905	1.920
AL IV	.088	.150	.134	.102	.095	.080
AL VI	-	.002	.040	.009	.004	.002
CR VI	.010	.007	.007	.009	.011	.009
TI VI	.051	.078	.085	.070	.046	.040
FE VI	.556	.568	.590	.588	.572	.568
MG VI	.804	.661	.486	.546	.800	.802
MN VI	-	.011	.012	.012	.012	.012
CA VI	.642	.664	.736	.737	.548	.560
NA VI	.015	.003	.005	.003	.004	.003
	-	-	-	-	-	-
WO	.321	.351	.406	.394	.285	.290
EN	.401	.349	.268	.292	.417	.416
FS	.278	.300	.325	.314	.298	.294

	G1B0LP003C	A3A4AP158A	G2A1LP071A	G3A3AP017A	G3A3AP056A	G1B0LP005B
SIO2	48.71	51.43	52.19	50.80	52.10	48.85
TIO2	1.82	.26	1.24	.37	.50	1.76
AL203	2.34	2.09	1.86	2.61	1.88	2.26
CR203	.23	.61	.44	.71	.58	.32
FEO	17.83	17.85	17.88	17.89	17.94	18.00
MNO	.39	.35	.34	.00	.00	.37
MGO	12.96	18.71	19.20	17.77	18.81	12.74
CAO	14.44	7.71	7.75	10.69	9.87	14.47
NA2O	.05	.02	.02	.14	.00	.05
TOTAL	98.77	99.03	100.94	100.97	101.67	98.82
SI IV	1.890	1.940	1.930	1.897	1.923	1.896
AL IV	.107	.060	.070	.103	.077	.103
AL VI	-	.033	.011	.012	.004	-
CR VI	.007	.018	.013	.021	.017	.010
TI VI	.053	.007	.035	.010	.014	.051
FE VI	.579	.563	.553	.559	.554	.584
MG VI	.749	1.052	1.058	.989	1.035	.737
MN VI	.013	.011	.011	-	-	.012
CA VI	.600	.312	.307	.428	.390	.602
NA VI	.004	.001	.001	.010	-	.004
	-	-	-	-	-	-
WO	.311	.162	.160	.217	.197	.313
EN	.389	.546	.552	.501	.523	.383
FS	.300	.292	.288	.283	.280	.304

TABLE 8. CONTINUED

	G1H0AP012A	A3A3AP053A	A3A1AP001A	A3A2PP006A	A3A3AP107A	G1B0LP003H
SIO2	47.31	51.85	47.29	48.69	50.92	48.94
TIO2	3.07	.58	1.69	2.28	1.59	2.56
AL203	3.74	1.73	2.71	2.99	1.90	3.21
CR203	.23	.54	.23	.21	.28	.32
FEO	18.03	18.10	18.13	18.14	18.16	18.25
MNO	.31	.38	.25	.40	.37	.33
MGO	9.05	18.39	12.80	12.90	15.17	13.28
CAO	15.51	8.01	13.21	11.87	11.48	13.77
NA2O	.08	.02	.26	.03	.05	.07
TOTAL	97.33	99.58	96.57	97.51	99.93	100.72
SI IV	1.872	1.948	1.878	1.899	1.929	1.859
AL IV	.128	.053	.122	.101	.071	.141
AL VI	.046	.024	.005	.037	.014	.003
CR VI	.007	.016	.007	.007	.008	.010
TI VI	.091	.016	.050	.067	.045	.073
FE VI	.597	.569	.602	.592	.575	.580
MG VI	.534	1.030	.758	.750	.857	.752
MN VI	.010	.012	.008	.013	.012	.011
CA VI	.657	.322	.562	.496	.466	.560
NA VI	.006	.001	.020	.002	.004	.005
WO	.368	.168	.292	.270	.246	.296
EN	.299	.536	.394	.408	.451	.397
FS	.334	.296	.313	.322	.303	.306

	G3A3AP026A	A3A4AP073B	A3A4LP076A	G3A1LP052A	G1B0LP006D	A3A1LP060J
SIO2	49.50	50.07	49.02	50.13	49.27	48.97
TIO2	1.67	1.33	2.14	1.18	2.00	2.41
AL203	2.06	1.98	2.49	1.97	2.39	2.84
CR203	.29	.23	.26	.49	.30	.24
FEO	18.28	18.51	18.54	18.56	18.57	18.58
MNO	.34	.44	.38	.28	.33	.29
MGO	13.21	15.13	12.35	16.82	13.50	11.17
CAO	13.77	10.66	13.80	9.27	12.97	15.93
NA2O	.07	.05	.05	.05	.04	.10
TOTAL	99.18	98.39	99.04	98.76	99.37	100.52
SI IV	1.909	1.928	1.897	1.917	1.895	1.878
AL IV	.091	.072	.103	.083	.105	.122
AL VI	.003	.018	.011	.006	.003	.006
CR VI	.009	.007	.008	.015	.009	.007
TI VI	.048	.038	.062	.034	.058	.070
FE VI	.590	.596	.600	.593	.597	.596
MG VI	.759	.869	.712	.959	.774	.638
MN VI	.011	.014	.012	.009	.011	.009
CA VI	.569	.440	.572	.380	.535	.655
NA VI	.005	.004	.004	.004	.003	.007
WO	.297	.231	.304	.197	.280	.347
EN	.396	.456	.378	.496	.406	.338
FS	.307	.313	.318	.307	.313	.315

TABLE 8. CONTINUED

	G3A3AP058A	A3A1LP060A	G3A2LP152A	A3A4PP070B	A3A3AP023A	A3A5AP169A
SIO2	44.93	47.89	51.40	50.08	49.96	50.08
TIO2	3.36	3.34	1.23	1.38	1.88	1.56
AL2O3	8.98	4.06	1.73	1.74	2.53	1.98
CR2O3	.31	.28	.42	.19	.33	.38
FEO	18.61	18.63	18.65	18.66	18.66	18.68
MNO	.27	.28	.40	.45	.43	.43
MGO	12.78	11.70	18.53	15.71	14.11	16.08
CAO	8.74	14.88	7.88	10.12	11.91	10.21
NA2O	.20	.06	.02	.03	.05	.03
TOTAL	98.18	101.12	100.25	98.36	99.85	99.43
SI IV	1.733	1.824	1.925	1.929	1.904	1.909
AL IV	.267	.176	.075	.071	.096	.089
AL VI	.141	.006	.001	.008	.018	-
CR VI	.010	.008	.012	.006	.010	.012
TI VI	.098	.096	.035	.040	.054	.045
FE VI	.600	.593	.584	.601	.595	.596
MG VI	.735	.664	1.034	.902	.802	.914
MN VI	.009	.009	.013	.015	.014	.014
CA VI	.361	.607	.316	.418	.486	.417
NA VI	.015	.004	.001	.002	.004	.002
WO	.213	.326	.163	.217	.258	.217
EN	.433	.356	.535	.470	.426	.474
FS	.354	.318	.302	.313	.316	.309

	A3A2PP022A	G3A3AP018A	G3A3AP055B	G2A1LP037A	A3A5AP219A	G3A3LP073B
SIO2	49.09	51.63	48.93	47.75	48.66	49.05
TIO2	1.17	.63	1.40	2.12	2.46	1.67
AL2O3	1.44	1.40	1.88	2.42	3.17	2.06
CR2O3	.23	.48	.25	.16	.33	.30
FEO	18.69	18.73	18.83	18.88	18.96	18.98
MNO	.46	.00	.43	.37	.34	.35
MGO	12.76	19.07	13.52	9.97	12.29	11.55
CAO	12.81	7.82	12.70	17.49	13.20	15.20
NA2O	.02	.16	.01	.03	.05	.08
TOTAL	96.68	99.90	97.96	99.19	99.47	99.25
SI IV	1.944	1.938	1.913	1.874	1.876	1.907
AL IV	.056	.062	.087	.112	.124	.093
AL VI	.011	-	-	-	.019	.001
CR VI	.007	.014	.008	.005	.010	.009
TI VI	.035	.018	.041	.063	.071	.049
FE VI	.619	.588	.616	.620	.611	.617
MG VI	.753	1.067	.788	.583	.706	.669
MN VI	.015	-	.014	.012	.011	.012
CA VI	.543	.314	.532	.735	.545	.633
NA VI	.001	.012	.001	.002	.004	.006
WO	.284	.160	.275	.379	.293	.330
EN	.393	.542	.407	.301	.379	.349
FS	.323	.299	.318	.320	.328	.321

TABLE 8. CONTINUED

	A3A3LP128A	A3A3AP156A	A3A1LP045B	G3A2AP005A	G3A1LP136A	G3A3LP075A
SIO2	50.20	50.46	49.64	49.78	49.46	49.50
TIO2	1.70	1.15	1.56	1.84	1.23	1.82
AL2O3	2.11	2.33	2.18	2.46	1.52	2.15
CR2O3	.27	.52	.28	.30	.36	.30
FEO	18.99	19.05	19.06	19.15	19.21	19.29
MNO	.42	.40	.34	.36	.37	.38
MGO	13.83	18.51	11.64	14.00	12.61	13.88
CAO	12.39	7.24	15.21	12.22	13.96	11.98
NA2O	.07	.03	.11	.05	.05	.07
TOTAL	99.98	99.68	100.01	100.17	98.78	99.36
SI IV	1.916	1.904	1.912	1.898	1.926	1.905
AL IV	.084	.096	.088	.102	.070	.095
AL VI	.011	.007	.011	.009	-	.002
CR VI	.008	.015	.008	.009	.011	.009
TI VI	.049	.033	.045	.053	.036	.053
FE VI	.606	.601	.614	.611	.626	.621
MG VI	.787	1.041	.668	.796	.732	.796
MN VI	.014	.013	.011	.012	.012	.012
CA VI	.507	.293	.628	.499	.582	.494
NA VI	.005	.002	.008	.004	.004	.005
WO	.267	.151	.329	.262	.300	.259
EN	.414	.538	.350	.418	.377	.417
FS	.319	.311	.321	.320	.322	.325

	A3A4AP160A	A3A3LP119A	A3A3AP106A	G1B0LP007F	A3A1LP093B	G2A1LP038A
SIO2	51.97	49.56	48.74	49.93	49.70	50.02
TIO2	.23	1.93	3.00	1.63	1.50	1.28
AL2O3	1.26	2.85	3.90	2.18	2.04	2.39
CR2O3	.47	.40	.25	.34	.31	.48
FEO	19.36	19.45	19.48	19.60	19.62	19.65
MNO	.37	.43	.34	.38	.35	.41
MGO	16.53	14.08	13.83	16.74	10.79	16.06
CAO	9.49	10.60	11.33	9.04	15.82	9.74
NA2O	.02	.09	.07	.04	.09	.01
TOTAL	99.70	99.39	100.94	99.89	100.21	100.02
SI IV	1.969	1.899	1.844	1.897	1.918	1.900
AL IV	.031	.101	.156	.098	.082	.100
AL VI	.025	.028	.018	-	.011	.007
CR VI	.014	.012	.008	.010	.010	.014
TI VI	.007	.056	.085	.047	.044	.037
FE VI	.613	.623	.616	.623	.633	.624
MG VI	.933	.804	.780	.948	.621	.910
MN VI	.012	.014	.011	.012	.011	.013
CA VI	.385	.435	.459	.368	.654	.396
NA VI	.001	.007	.005	.003	.007	.001
WO	.199	.234	.248	.190	.343	.205
EN	.483	.432	.420	.489	.325	.471
FS	.317	.335	.332	.321	.332	.323

TABLE 8. CONTINUED

	A3A3LP039A	A3A4LP010A	A3A2LP009A	A3A1LP045C	A3A4AP143A	A3A4LP101A
SIO2	48.45	51.97	49.51	49.89	50.13	50.00
TIO2	1.56	.75	1.34	1.39	1.57	1.47
AL203	2.18	.87	3.44	1.83	2.23	1.96
CR203	.31	.40	.29	.23	.31	.26
FEO	19.70	19.86	19.94	19.96	19.97	20.00
MNO	.37	.38	.39	.42	.41	.39
MGO	8.31	18.22	11.71	13.18	15.24	13.19
CAO	17.27	7.03	9.90	13.00	9.82	11.98
NA2O	.04	.02	.00	.07	.05	.05
TOTAL	98.20	99.49	98.52	99.96	99.73	99.30
SI IV	1.923	1.965	1.948	1.918	1.913	1.928
AL IV	.077	.035	.052	.082	.087	.072
AL VI	.025	.004	.107	.001	.013	.017
CR VI	.010	.012	.009	.007	.009	.008
TI VI	.047	.021	.040	.040	.045	.043
FE VI	.654	.628	.656	.642	.637	.645
MG VI	.492	1.027	.687	.755	.867	.758
MN VI	.012	.012	.013	.014	.013	.013
CA VI	.734	.285	.417	.535	.401	.495
NA VI	.003	.001	-	.005	.004	.004
WO	.391	.147	.237	.277	.211	.261
EN	.262	.529	.390	.391	.455	.399
FS	.348	.324	.373	.332	.334	.340

	G3A1CP037A	G3A2GP517A	G3A3LP073A	G1B0LP006C	G3A3LP079A	A3A4LP127B
SIO2	44.93	49.42	50.35	49.85	47.94	49.67
TIO2	3.53	1.63	1.42	1.72	2.61	1.64
AL203	9.26	2.16	1.60	2.32	3.17	2.02
CR203	.25	.28	.36	.31	.32	.15
FEO	20.07	20.08	20.13	20.13	20.13	20.14
MNO	.25	.39	.35	.33	.46	.49
MGO	11.11	12.55	16.52	15.83	13.14	13.75
CAO	9.29	12.75	8.43	9.79	11.46	10.85
NA2O	.13	.03	.07	.05	.03	.02
TOTAL	98.82	99.29	99.45	100.35	99.26	98.73
SI IV	1.734	1.914	1.921	1.893	1.857	1.923
AL IV	.266	.087	.079	.104	.143	.077
AL VI	.155	.012	.001	-	.002	.015
CR VI	.008	.009	.011	.009	.010	.005
TI VI	.102	.047	.041	.049	.076	.048
FE VI	.648	.650	.642	.639	.652	.652
MG VI	.639	.724	.939	.896	.759	.794
MN VI	.008	.013	.011	.011	.015	.016
CA VI	.384	.529	.345	.398	.476	.450
NA VI	.010	.002	.005	.004	.002	.001
WO	.230	.278	.179	.206	.252	.237
EN	.382	.381	.488	.463	.402	.419
FS	.388	.342	.333	.331	.346	.344

TABLE 8. CONTINUED

	G3A1PP068A	A3A3PP162A	A3A5AP100A	G3A3AP081B	A3A3AP157A	A3A4AP105B
SIO2	49.67	47.95	49.16	51.09	49.91	50.50
TIO2	1.66	1.39	1.46	.39	.83	1.20
AL203	2.18	1.93	1.95	2.56	1.68	1.68
CR203	.27	.28	.23	.16	.36	.33
FEO	20.16	20.17	20.21	20.43	20.47	20.47
MNO	.38	.42	.43	.50	.41	.42
MGO	14.35	13.36	14.97	16.89	14.78	16.25
CAO	10.92	11.49	8.31	7.50	8.66	8.26
NA2O	.03	.08	.02	.05	.04	.03
TOTAL	99.63	97.06	96.73	99.56	97.14	99.14
SI IV	1.907	1.902	1.931	1.937	1.954	1.933
AL IV	.093	.090	.069	.063	.046	.067
AL VI	.005	-	.021	.052	.031	.009
CR VI	.008	.009	.007	.005	.011	.010
TI VI	.048	.041	.043	.011	.024	.035
FE VI	.647	.669	.664	.648	.670	.655
MG VI	.821	.790	.877	.955	.862	.927
MN VI	.012	.014	.014	.016	.014	.014
CA VI	.449	.488	.350	.305	.363	.339
NA VI	.002	.006	.001	.004	.003	.002
	-	-	-	-	-	-
WO	.234	.251	.185	.160	.192	.176
EN	.428	.406	.464	.501	.455	.483
FS	.338	.344	.351	.340	.354	.341

	A3A4LP058A	G1H0AP010B	G1B0LP007E	G3A3AP026A	A3A2AP069A	A3A4LP103A
SIO2	49.23	48.84	50.85	49.74	48.75	49.35
TIO2	1.31	2.49	1.43	1.82	1.63	1.85
AL203	1.71	3.54	1.68	1.89	2.37	2.37
CR203	.26	.21	.33	.30	.33	.19
FEO	20.47	20.55	20.58	20.58	20.60	20.65
MNO	.44	.34	.35	.00	.39	.40
MGO	12.49	16.57	17.75	14.06	11.14	13.24
CAO	12.70	8.90	7.36	12.48	12.42	11.05
NA2O	.07	.11	.03	.18	.00	.06
TOTAL	98.66	101.54	100.37	101.04	97.65	99.15
SI IV	1.924	1.834	1.918	1.893	1.924	1.909
AL IV	.076	.157	.075	.085	.076	.091
AL VI	.003	-	-	-	.035	.017
CR VI	.008	.006	.010	.009	.010	.006
TI VI	.038	.070	.041	.052	.048	.054
FE VI	.669	.645	.649	.655	.680	.668
MG VI	.727	.928	.998	.798	.655	.763
MN VI	.015	.011	.011	-	.013	.013
CA VI	.532	.358	.297	.509	.525	.458
NA VI	.005	.008	.002	.013	-	.004
	-	-	-	-	-	-
WO	.276	.185	.153	.259	.282	.242
EN	.377	.480	.513	.407	.352	.404
FS	.347	.334	.334	.334	.365	.354

TABLE 8. CONTINUED

	G2A1LP054A	G3A3AP063A	G1B0LP005C	G3A2AP031A	G3A3AP046A	G2A1LP085A
SIO2	48.43	49.29	49.56	49.01	50.56	49.37
TIO2	2.39	1.58	1.75	1.49	1.33	1.41
AL2O3	2.63	1.94	2.30	1.79	1.64	1.68
CR2O3	.14	.31	.31	.23	.28	.22
FEO	20.65	20.96	21.00	21.05	21.12	21.19
MNO	.40	.40	.37	.42	.00	.51
MGO	9.22	13.65	16.20	10.42	15.08	11.04
CAO	15.94	10.71	8.33	15.33	10.61	13.61
NA2O	.04	.06	.05	.04	.02	.02
TOTAL	99.85	99.10	99.88	99.79	100.64	99.06
SI IV	1.890	1.911	1.892	1.914	1.921	1.932
AL IV	.110	.089	.104	.082	.073	.068
AL VI	.011	-	-	-	-	.010
CR VI	.004	.010	.009	.007	.008	.007
TI VI	.070	.046	.050	.044	.038	.041
FE VI	.674	.679	.670	.687	.671	.694
MG VI	.536	.800	.922	.606	.854	.644
MN VI	.013	.013	.012	.014	-	.017
CA VI	.667	.445	.341	.641	.432	.571
NA VI	.003	.004	.004	.003	.001	.001
WO	.355	.231	.176	.331	.221	.299
EN	.286	.416	.477	.313	.436	.337
FS	.359	.353	.347	.355	.343	.363

	G3A1PP046B	G3A2PP137A	A3A5AP164A	A3A1LP055A	A3A3LP138A	G1H0AP017A
SIO2	49.52	50.91	50.08	50.90	49.61	48.14
TIO2	1.42	1.04	1.26	.99	1.61	1.75
AL2O3	1.73	1.01	1.56	.88	2.11	1.84
CR2O3	.26	.24	.27	.28	.25	.23
FEO	21.29	21.34	21.39	21.39	21.41	21.42
MNO	.38	.45	.43	.38	.42	.39
MGO	13.35	15.97	14.10	14.72	12.21	11.23
CAO	11.26	8.26	9.48	10.29	11.78	13.40
NA2O	.02	.02	.03	.05	.08	.06
TOTAL	99.23	99.23	98.59	99.88	99.50	98.46
SI IV	1.921	1.954	1.944	1.953	1.922	1.902
AL IV	.079	.046	.056	.040	.077	.086
AL VI	-	-	.015	-	.019	-
CR VI	.008	.007	.008	.008	.008	.007
TI VI	.041	.030	.037	.029	.047	.052
FE VI	.691	.685	.694	.686	.694	.708
MG VI	.772	.913	.816	.842	.705	.661
MN VI	.012	.015	.014	.012	.014	.013
CA VI	.468	.340	.394	.423	.489	.567
NA VI	.001	.001	.002	.004	.006	.005
WO	.242	.175	.207	.217	.259	.293
EN	.400	.471	.428	.431	.374	.342
FS	.358	.353	.365	.352	.367	.366

TABLE 8. CONTINUED

	A3A4AP163A	A3A2LP092A	A3A4LP036A	A3A4AP089A	G3A2AP015A	A3A1LP093E
SIO2	50.35	49.04	49.13	51.32	48.44	50.04
TIO2	.95	2.46	1.55	.62	2.60	1.28
AL2O3	1.54	3.02	1.92	1.57	3.23	1.77
CR2O3	.39	.31	.23	.40	.34	.27
FEO	21.43	21.53	21.54	21.59	21.59	21.68
MNO	.43	.29	.36	.38	.45	.39
MGO	14.25	9.08	9.71	16.92	12.54	11.92
CAO	10.38	14.53	15.25	7.01	11.79	12.75
NA2O	.03	.04	.04	.01	.04	.09
TOTAL	99.75	100.30	99.74	99.82	101.02	100.11
SI IV	1.937	1.900	1.921	1.950	1.855	1.932
AL IV	.063	.100	.079	.050	.145	.068
AL VI	.007	.038	.010	.020	.001	.012
CR VI	.012	.010	.007	.012	.010	.008
TI VI	.028	.072	.046	.018	.075	.037
FE VI	.689	.697	.704	.686	.691	.700
MG VI	.817	.524	.566	.958	.716	.686
MN VI	.014	.010	.012	.012	.015	.013
CA VI	.428	.603	.639	.285	.484	.527
NA VI	.002	.003	.003	.001	.003	.007
WO	.221	.330	.335	.148	.256	.276
EN	.422	.287	.296	.497	.379	.358
FS	.356	.382	.369	.356	.366	.366

	A3A3AP049A	A3A3AP078A	G2A1LP060B	G1B0LP005D	G1H0AP010A	G3A2LP028A
SIO2	48.36	49.04	50.56	48.65	47.73	48.46
TIO2	1.25	1.82	1.24	1.48	1.03	1.47
AL2O3	1.73	2.75	1.58	2.00	1.16	2.02
CR2O3	.30	.27	.27	.32	.14	.17
FEO	21.89	21.97	21.97	22.04	22.11	22.25
MNO	.43	.46	.41	.42	.45	.43
MGO	16.10	12.90	14.65	12.77	8.96	10.06
CAO	7.19	9.80	9.52	11.29	16.06	13.26
NA2O	.04	.08	.03	.06	.05	.03
TOTAL	97.30	99.08	100.23	99.03	97.69	98.17
SI IV	1.904	1.904	1.934	1.903	1.926	1.924
AL IV	.080	.096	.066	.092	.055	.076
AL VI	-	.029	.005	-	-	.019
CR VI	.009	.008	.008	.010	.004	.005
TI VI	.037	.053	.036	.044	.031	.044
FE VI	.721	.713	.703	.721	.746	.739
MG VI	.945	.746	.835	.744	.539	.595
MN VI	.014	.015	.013	.014	.015	.015
CA VI	.303	.408	.390	.473	.694	.564
NA VI	.003	.006	.002	.004	.004	.002
WO	.154	.218	.202	.244	.351	.297
EN	.480	.400	.433	.384	.272	.314
FS	.366	.382	.364	.372	.377	.389

TABLE 8. CONTINUED

	G3A1PP046A	G3A3AP045A	A3A1AP096A	G1B0LP004C	G3A3AP055C	A3A1LP093C
SIO2	49.11	49.55	47.73	50.00	49.58	49.70
TIO2	1.50	1.32	2.40	1.27	.51	1.37
AL203	1.74	1.64	3.27	1.83	1.82	1.95
CR203	.23	.24	.36	.27	.51	.23
FEO	22.27	22.34	22.42	22.49	22.50	22.54
MNO	.39	.00	.43	.41	.43	.42
MGO	11.34	9.81	7.61	15.24	13.14	11.58
CAO	12.58	14.14	15.59	8.40	10.46	12.37
NA2O	.04	.02	.07	.02	.00	.07
TOTAL	99.20	99.06	99.89	99.93	98.96	100.23
SI IV	1.923	1.946	1.878	1.919	1.935	1.924
AL IV	.077	.054	.122	.081	.065	.076
AL VI	.004	.022	.030	.001	.019	.013
CR VI	.007	.008	.011	.008	.016	.007
TI VI	.044	.039	.071	.037	.015	.040
FE VI	.729	.734	.738	.722	.734	.730
MG VI	.662	.574	.446	.872	.764	.668
MN VI	.013	-	.014	.013	.014	.014
CA VI	.528	.595	.657	.345	.437	.513
NA VI	.003	.001	.005	.001	-	.005
	-	-	-	-	-	-
WO	.275	.313	.357	.178	.226	.268
EN	.345	.302	.242	.450	.395	.350
FS	.380	.386	.401	.372	.379	.382

	A3A1LP060B	G3A1LP128A	G3A2LP062A	A3A5AP159A	A3A1AP096C	A3A1LP115A
SIO2	49.72	49.44	48.80	48.02	47.02	49.52
TIO2	1.68	1.19	1.58	3.23	2.36	1.51
AL203	2.07	2.70	1.71	3.35	2.55	2.26
CR203	.27	.26	.14	.31	.12	.19
FEO	22.55	22.56	22.82	22.92	22.93	22.97
MNO	.32	.42	.42	.27	.38	.42
MGO	11.48	12.37	7.81	10.70	7.32	14.10
CAO	12.46	9.27	17.34	13.08	16.70	8.45
NA2O	.04	.02	.03	.11	.33	.06
TOTAL	100.58	98.23	100.67	101.99	98.72	99.49
SI IV	1.918	1.934	1.916	1.839	1.870	1.914
AL IV	.082	.066	.079	.151	.120	.086
AL VI	.012	.059	-	-	-	.017
CR VI	.008	.008	.004	.009	.004	.006
TI VI	.049	.035	.047	.093	.071	.044
FE VI	.727	.738	.749	.734	.763	.742
MG VI	.660	.721	.457	.611	.434	.812
MN VI	.010	.014	.014	.009	.013	.014
CA VI	.515	.389	.729	.537	.712	.350
NA VI	.003	.001	.002	.008	.025	.004
	-	-	-	-	-	-
WO	.271	.210	.377	.285	.373	.184
EN	.347	.390	.236	.325	.227	.426
FS	.382	.399	.387	.390	.400	.390

TABLE 8. CONTINUED

	A3A4LP104A	G1B0LP005A	G3A2PP017A	G3A1PP068B	G1B0LP002A	A3A2AP066A
SIO2	49.21	49.27	50.53	49.71	48.72	49.31
TIO2	1.35	1.52	1.44	1.04	1.45	1.36
AL203	1.73	2.03	1.86	1.39	1.89	1.44
CR203	.21	.26	.26	.24	.40	.19
FEO	23.00	23.08	23.18	23.25	23.31	23.32
MNO	.49	.42	.46	.40	.71	.50
MGO	11.52	11.96	14.68	14.08	12.65	10.93
CAO	11.86	11.37	9.16	8.86	10.30	11.28
NA2O	.03	.04	.04	.02	.14	.00
TOTAL	99.40	99.94	101.61	98.99	99.57	98.33
SI IV	1.926	1.914	1.915	1.937	1.904	1.950
AL IV	.074	.086	.083	.063	.087	.050
AL VI	.006	.007	-	.001	-	.017
CR VI	.007	.008	.008	.007	.012	.006
TI VI	.040	.044	.041	.031	.043	.040
FE VI	.753	.750	.735	.758	.762	.771
MG VI	.672	.693	.829	.818	.737	.644
MN VI	.016	.014	.015	.013	.023	.017
CA VI	.497	.473	.372	.370	.431	.478
NA VI	.002	.003	.003	.001	.011	-
WO	.259	.247	.192	.190	.223	.252
EN	.350	.362	.428	.420	.382	.340
FS	.392	.391	.380	.389	.395	.407

	A3A3PP145A	A3A1LP093G	A3A1LP093A	G2A1LP137A	A3A1LP050B	A3A4LP091A
SIO2	49.58	50.06	49.48	48.31	50.02	48.15
TIO2	1.26	1.22	1.50	1.08	1.27	2.15
AL203	1.52	1.69	2.04	1.25	1.80	2.81
CR203	.22	.26	.28	.21	.24	.11
FEO	23.40	23.42	23.44	23.50	23.72	23.86
MNO	.51	.41	.37	.45	.44	.50
MGO	10.34	11.85	10.31	9.47	14.61	11.19
CAO	13.10	11.29	12.24	14.49	7.99	10.90
NA2O	.05	.07	.09	.02	.05	.03
TOTAL	99.97	100.26	99.73	98.80	100.14	99.69
SI IV	1.939	1.938	1.932	1.927	1.924	1.883
AL IV	.062	.062	.068	.059	.076	.117
AL VI	.008	.015	.026	-	.005	.013
CR VI	.007	.008	.009	.007	.007	.003
TI VI	.037	.035	.044	.032	.037	.063
FE VI	.765	.758	.766	.784	.763	.781
MG VI	.602	.684	.600	.563	.838	.652
MN VI	.017	.013	.012	.015	.014	.017
CA VI	.549	.468	.512	.619	.329	.457
NA VI	.004	.005	.007	.001	.004	.002
WO	.286	.245	.273	.315	.171	.242
EN	.314	.358	.320	.286	.434	.345
FS	.399	.397	.408	.399	.395	.413

TABLE 8. CONTINUED

	A3A4AP093A	A3A1LP050A	G3A2LP051A	A3A2LP035A	G3A2LP042A	A3A1LP093F
SIO2	49.32	49.94	50.03	51.59	49.44	50.01
TIO2	1.23	1.46	1.43	.88	1.49	1.17
AL2O3	1.64	1.83	1.90	2.15	1.97	1.81
CR2O3	.20	.22	.17	.21	.24	.25
FEO	23.86	23.91	24.08	24.19	24.19	24.19
MNO	.47	.44	.45	.44	.48	.43
MGO	12.19	12.72	14.41	12.98	13.25	12.74
CAO	10.10	10.07	7.84	8.53	8.95	9.70
NA2O	.05	.05	.03	.00	.02	.07
TOTAL	99.04	100.65	100.35	100.98	100.01	100.15
SI IV	1.934	1.924	1.922	1.964	1.915	1.936
AL IV	.066	.076	.078	.036	.085	.064
AL VI	.010	.007	.008	.060	.005	.010
CR VI	.005	.007	.005	.006	.007	.008
TI VI	.036	.042	.041	.025	.043	.034
FE VI	.782	.770	.774	.770	.784	.783
MG VI	.712	.730	.825	.736	.765	.735
MN VI	.016	.014	.015	.014	.016	.014
CA VI	.424	.416	.323	.348	.372	.402
NA VI	.004	.004	.002	-	.001	.005
WO	.221	.217	.168	.188	.193	.209
EN	.371	.381	.429	.397	.398	.383
FS	.408	.402	.403	.415	.408	.408

	G1G0LP001B	A3A1LP093H	G3A1LP007A	A3A3AP088A	A3A4AP073A	G1H0AP009A
SIO2	48.92	50.19	44.83	49.76	49.86	49.77
TIO2	1.43	.84	4.35	.35	1.32	1.01
AL2O3	1.76	1.08	5.19	1.69	1.97	1.12
CR2O3	.35	.16	.18	.41	.23	.19
FEO	24.19	24.21	24.24	24.45	24.49	24.61
MNO	.69	.43	.37	.50	.43	.43
MGO	11.20	11.01	8.78	12.48	10.78	14.29
CAO	11.87	12.00	12.75	8.65	11.14	7.75
NA2O	.14	.07	.05	.07	.06	.02
TOTAL	100.54	99.99	100.84	98.37	100.27	99.19
SI IV	1.907	1.959	1.760	1.960	1.938	1.941
AL IV	.081	.041	.240	.040	.062	.052
AL VI	-	.009	-	.038	.028	-
CR VI	.011	.005	.006	.013	.007	.006
TI VI	.042	.025	.128	.010	.039	.030
FE VI	.789	.790	.794	.805	.796	.803
MG VI	.651	.641	.513	.733	.624	.831
MN VI	.023	.014	.012	.017	.014	.014
CA VI	.496	.502	.535	.365	.464	.324
NA VI	.011	.005	.004	.005	.004	.001
WO	.256	.260	.291	.192	.246	.165
EN	.336	.331	.278	.385	.331	.424
FS	.408	.409	.431	.423	.422	.410

TABLE 8. CONTINUED

	G1B0LP003D	A3A1LP093D	A3A2LP013A	G3A1LP020A	A3A5AP153A	G3A2LP070A
SIO2	49.09	49.76	50.23	48.86	51.59	48.59
TIO2	1.79	1.04	.99	1.06	.44	1.60
AL2O3	2.37	1.36	1.34	1.43	2.59	1.95
CR2O3	.23	.21	.22	.21	.88	.10
FEO	24.65	24.68	24.88	24.90	24.93	25.03
MNO	.38	.45	.45	.46	.33	.48
MGO	12.14	12.14	12.91	10.04	9.42	8.70
CAO	9.83	9.83	7.85	11.49	10.71	13.96
NA2O	.06	.07	.00	.02	.01	.03
TOTAL	100.53	99.55	98.86	98.47	100.96	100.43
SI IV	1.901	1.946	1.964	1.947	1.982	1.912
AL IV	.099	.054	.036	.053	.018	.088
AL VI	.009	.008	.026	.014	.099	.003
CR VI	.007	.007	.007	.007	.027	.003
TI VI	.052	.031	.029	.032	.013	.047
FE VI	.798	.807	.814	.830	.803	.824
MG VI	.701	.707	.752	.596	.539	.510
MN VI	.012	.015	.015	.015	.011	.016
CA VI	.408	.412	.329	.490	.441	.589
NA VI	.004	.005	-	.001	.001	.002
	-	-	-	-	-	-
WO	.214	.214	.174	.256	.247	.306
EN	.367	.367	.397	.311	.303	.265
FS	.419	.419	.429	.433	.450	.428

	A3A3AP082A	G3A3AP056A	G1B0LP006A	A3A1LP045E	G3A2AP048A	A3A5PP085A
SIO2	49.40	49.16	49.86	48.90	49.47	48.59
TIO2	1.05	.42	1.30	1.10	1.25	1.18
AL2O3	1.51	1.22	1.50	1.36	1.57	1.55
CR2O3	.22	.43	.20	.22	.22	.29
FEO	25.05	25.41	25.46	25.72	25.81	25.94
MNO	.49	.38	.45	.43	.48	.38
MGO	13.04	13.30	14.09	10.41	10.16	9.43
CAO	7.38	7.19	7.16	11.47	11.51	11.79
NA2O	.03	.02	.01	.07	.03	.06
TOTAL	98.18	97.54	100.04	99.67	100.50	99.21
SI IV	1.949	1.957	1.931	1.932	1.936	1.933
AL IV	.051	.043	.069	.063	.065	.067
AL VI	.020	.014	-	-	.008	.006
CR VI	.007	.014	.006	.007	.007	.009
TI VI	.031	.013	.038	.033	.037	.035
FE VI	.827	.846	.825	.850	.845	.863
MG VI	.767	.789	.813	.613	.593	.559
MN VI	.016	.013	.015	.014	.016	.013
CA VI	.312	.307	.297	.486	.483	.503
NA VI	.002	.001	.001	.005	.002	.005
	-	-	-	-	-	-
WO	.164	.158	.154	.249	.251	.261
EN	.402	.406	.420	.315	.309	.291
FS	.434	.436	.426	.436	.440	.448

TABLE 8. CONTINUED

	A3A5AP073B	A3A5AP024A	A3A4LP036B	G3A2LP207A	G3A2LP152C	A3A1LP060C
SIO2	46.22	48.39	48.38	48.91	49.45	48.89
TIO2	1.52	1.15	1.18	1.15	1.25	1.35
AL2O3	1.77	1.28	1.43	1.67	1.54	1.86
CR2O3	N.A.	.13	.22	.20	.19	.23
FEO	26.40	26.51	26.59	26.64	26.81	27.05
MNO	N.A.	.49	.48	.46	.52	.27
MGO	6.19	10.20	8.20	9.18	10.92	8.19
CAO	14.43	9.10	12.67	11.69	9.64	12.50
NA2O	N.A.	.05	.05	.05	.02	.11
TOTAL	96.52	97.30	99.21	100.15	100.34	100.46
SI IV	1.918	1.955	1.938	1.932	1.936	1.931
AL IV	.082	.045	.062	.068	.064	.069
AL VI	.004	.016	.005	.010	.008	.017
CR VI	-	.004	.007	.006	.006	.007
TI VI	.047	.035	.035	.034	.037	.040
FE VI	.916	.896	.891	.880	.878	.893
MG VI	.383	.614	.490	.541	.637	.482
MN VI	-	.017	.016	.015	.017	.009
CA VI	.641	.394	.544	.503	.405	.529
NA VI	-	.004	.004	.004	.001	.008
WO	.331	.207	.283	.262	.211	.278
EN	.197	.323	.254	.281	.332	.253
FS	.472	.470	.463	.457	.457	.469

	G1H0LP016A	A3A1AP049A	G1H0AP018A	G3A3LP009A	G1H0CP027A	G1H0LP013A
SIO2	47.91	48.62	48.70	46.54	48.46	48.39
TIO2	1.19	1.41	1.00	1.25	.70	1.29
AL2O3	1.38	1.92	1.25	1.50	.72	1.70
CR2O3	.19	.23	.10	.21	.20	.16
FEO	27.12	27.16	27.27	27.31	27.38	27.81
MNO	.47	.39	.47	.48	.49	.49
MGO	8.32	9.37	10.15	7.83	9.02	10.25
CAO	12.30	10.57	10.37	12.58	9.96	8.81
NA2O	.05	.06	.01	.04	.04	.03
TOTAL	98.93	99.73	99.33	97.75	96.97	98.95
SI IV	1.929	1.927	1.939	1.909	1.979	1.931
AL IV	.065	.073	.059	.072	.021	.069
AL VI	-	.016	-	-	.013	.011
CR VI	.006	.007	.003	.007	.007	.005
TI VI	.036	.042	.030	.039	.022	.039
FE VI	.913	.900	.908	.937	.935	.928
MG VI	.499	.553	.602	.479	.549	.610
MN VI	.016	.013	.016	.017	.017	.017
CA VI	.531	.449	.442	.553	.436	.377
NA VI	.004	.005	.001	.003	.003	.002
WO	.273	.236	.227	.281	.227	.197
EN	.257	.291	.308	.243	.286	.318
FS	.470	.473	.465	.476	.487	.485

TABLE 8. CONTINUED

	G3A2LP014A	G3A3AP077A	A3A3AP067A	G1H0AP034A	G3A1PP046C	G2A1LP137B
SIO2	46.35	46.94	47.41	49.51	47.76	47.84
TIO2	1.01	1.40	1.06	.89	1.29	1.03
AL2O3	1.36	2.25	1.57	1.21	1.30	1.16
CR2O3	.08	.11	.18	.02	.22	.18
FEO	27.82	27.86	28.03	28.20	28.97	29.89
MNO	.73	.55	.51	.64	.47	.51
MGO	6.56	7.77	8.64	11.40	7.89	8.09
CAO	13.96	9.27	9.25	7.77	10.91	10.21
NA2O	.01	.04	.05	.02	.02	.02
TOTAL	97.68	96.19	96.70	99.67	98.84	98.93
SI IV	1.914	1.937	1.947	1.955	1.935	1.940
AL IV	.066	.063	.053	.045	.062	.055
AL VI	-	.046	.023	.011	-	-
CR VI	.003	.004	.006	.001	.007	.006
TI VI	.031	.043	.033	.026	.039	.031
FE VI	.961	.961	.963	.931	.981	1.014
MG VI	.404	.478	.529	.671	.476	.489
MN VI	.025	.019	.018	.021	.016	.018
CA VI	.617	.410	.407	.329	.474	.444
NA VI	.001	.003	.004	.001	.002	.002
WO	.312	.222	.214	.170	.245	.228
EN	.204	.258	.279	.347	.247	.251
FS	.485	.520	.507	.482	.508	.521

	A3A3AP115A	A3A1PP113A	A3A3AP174A	A3A1AP094B	A3A1AP120A	G3A3LP009B
SIO2	47.57	47.23	46.42	47.88	47.83	46.77
TIO2	1.52	1.12	.69	1.03	1.36	1.23
AL2O3	3.75	1.40	1.07	1.45	1.58	1.51
CR2O3	.18	.22	.38	.17	.19	.21
FEO	30.30	30.61	30.62	31.63	31.95	32.28
MNO	.41	.39	.27	.49	.43	.48
MGO	6.44	4.02	8.91	5.43	6.66	6.95
CAO	11.25	14.18	7.09	11.73	10.32	9.02
NA2O	.18	.08	.12	.06	.06	.04
TOTAL	101.60	99.24	95.55	99.85	100.39	98.49
SI IV	1.880	1.940	1.947	1.946	1.928	1.925
AL IV	.120	.060	.053	.055	.072	.073
AL VI	.055	.008	-	.015	.003	-
CR VI	.006	.007	.013	.005	.006	.007
TI VI	.045	.035	.022	.032	.041	.038
FE VI	1.002	1.051	1.074	1.075	1.077	1.111
MG VI	.379	.246	.557	.329	.400	.426
MN VI	.014	.014	.010	.017	.015	.017
CA VI	.477	.624	.319	.511	.446	.398
NA VI	.014	.006	.010	.005	.005	.003
WO	.257	.325	.163	.267	.232	.206
EN	.204	.128	.286	.172	.208	.220
FS	.539	.547	.551	.561	.560	.574

TABLE 8. CONTINUED

	A3A1LP026A	G3A2AP019B	G3A2LP011A	G1B0LP007B	G3A1LP016A	G1H0AP019A
SIO2	47.93	47.03	48.17	49.33	46.61	46.29
TIO2	1.52	.90	1.83	1.41	1.15	.82
AL203	1.61	1.33	2.94	2.00	1.22	.91
CR203	.12	.21	.04	.28	.15	.08
FEO	32.37	32.52	32.69	32.98	32.99	33.93
MNO	.56	.49	.64	.29	.43	.53
MGO	7.53	4.19	2.92	5.12	2.14	3.15
CAO	8.73	12.31	12.33	10.89	13.86	12.00
NA2O	.05	.02	.02	.08	.04	.14
TOTAL	100.42	99.01	101.59	102.38	98.58	97.84
SI IV	1.926	1.945	1.929	1.949	1.951	1.956
AL IV	.074	.055	.071	.051	.049	.044
AL VI	.002	.010	.068	.042	.012	.001
CR VI	.004	.007	.001	.009	.005	.003
TI VI	.046	.028	.055	.042	.036	.026
FE VI	1.088	1.125	1.095	1.090	1.155	1.199
MG VI	.451	.258	.174	.302	.134	.198
MN VI	.019	.017	.022	.010	.015	.019
CA VI	.376	.546	.529	.461	.622	.543
NA VI	.004	.002	.002	.006	.003	.012
WO	.196	.283	.294	.249	.325	.280
EN	.236	.134	.097	.163	.070	.102
FS	.568	.583	.609	.588	.605	.618

	A3A1AP094A	A3A5AP010A	G3A3LP066A	A3A3LP144A	G1H3LP028A	A3A3AP050A
SIO2	47.36	46.63	47.15	47.09	48.41	45.65
TIO2	1.01	1.07	.94	1.48	1.02	1.18
AL203	1.37	1.06	.99	1.54	1.52	1.53
CR203	.13	.13	.14	.11	.07	.04
FEO	34.76	34.88	35.13	36.35	36.77	37.12
MNO	.58	.56	.57	.67	.58	.65
MGO	4.03	4.19	5.30	2.89	6.00	.92
CAO	10.82	10.26	8.01	9.00	7.24	11.32
NA2O	.06	.01	.02	.01	.02	.03
TOTAL	100.12	98.78	98.26	99.14	101.63	98.43
SI IV	1.946	1.946	1.965	1.960	1.948	1.943
AL IV	.054	.052	.035	.040	.052	.057
AL VI	.012	-	.013	.035	.020	.020
CR VI	.004	.004	.005	.004	.002	.001
TI VI	.031	.034	.030	.046	.031	.038
FE VI	1.194	1.217	1.224	1.265	1.238	1.322
MG VI	.247	.261	.329	.179	.360	.058
MN VI	.020	.020	.020	.024	.020	.023
CA VI	.476	.459	.358	.401	.312	.516
NA VI	.005	.001	.002	.001	.002	.003
WO	.248	.237	.187	.217	.163	.272
EN	.129	.135	.172	.097	.188	.031
FS	.623	.629	.641	.685	.648	.697

TABLE 8. CONTINUED

	G3A2AP203A	G2A1LP078A	A3A4LP015A	G2A1LP044B	G3A2LP026A	A3A4LP015B
SIO2	46.01	46.43	45.95	45.30	44.88	46.08
TIO2	1.07	1.29	.98	1.20	1.77	.98
AL203	1.55	1.63	1.07	1.39	1.52	1.08
CR203	.12	.07	.04	.05	.07	.04
FEO	37.31	37.45	37.75	38.33	39.24	40.21
MNO	.60	.59	.62	.64	.60	.62
MGO	1.75	1.88	1.24	1.02	.94	.99
CAO	11.60	10.20	10.60	10.79	9.93	8.86
NA2O	.03	.03	.03	.01	.04	.03
TOTAL	100.03	99.55	98.28	98.74	98.98	98.88
SI IV	1.927	1.943	1.960	1.933	1.915	1.965
AL IV	.073	.057	.040	.067	.076	.035
AL VI	.003	.024	.014	.003	-	.019
CR VI	.004	.002	.001	.002	.002	.001
TI VI	.034	.041	.031	.038	.057	.031
FE VI	1.307	1.311	1.347	1.368	1.400	1.434
MG VI	.109	.117	.079	.065	.060	.063
MN VI	.021	.021	.022	.023	.022	.022
CA VI	.520	.457	.485	.493	.454	.405
NA VI	.002	.002	.003	.001	.003	.003
	-	-	-	-	-	-
WO	.269	.243	.254	.256	.237	.213
EN	.056	.062	.041	.034	.031	.033
FS	.675	.695	.705	.710	.732	.754

	G3A3AP068A	A3A4LP104B	G3A3AP004A
SIO2	45.88	46.50	45.19
TIO2	.97	.94	1.12
AL203	1.17	1.07	1.00
CR203	.07	.08	N.A.
FEO	40.63	40.89	41.26
MNO	.64	.61	N.A.
MGO	1.53	.92	.33
CAO	8.28	8.44	7.90
NA2O	.01	.04	N.A.
TOTAL	99.18	99.49	98.03
SI IV	1.952	1.971	1.958
AL IV	.048	.029	.042
AL VI	.010	.024	.009
CR VI	.002	.003	-
TI VI	.031	.030	.036
FE VI	1.445	1.449	1.495
MG VI	.097	.058	.021
MN VI	.023	.022	-
CA VI	.377	.383	.367
NA VI	.001	.003	-
	-	-	-
WO	.197	.203	.195
EN	.051	.031	.011
FS	.753	.767	.794

TABLE 9. PYROXENE ANALYSES - IV. TRAVERSES IN FRAGMENT A

	G1G0LPA105	G1G0LPA106	G1G0LPA107	G1G0LPA108	G1G0LPA109	G1G0LPA109
SIO2	47.95	47.45	47.07	48.04	45.41	47.75
TIO2	2.60	3.64	3.51	2.85	3.05	3.05
AL2O3	2.96	4.29	4.00	3.87	4.17	3.90
CR2O3	.35	.40	.40	.44	.43	.41
FEO	29.09	21.71	14.68	14.60	14.13	17.31
MNO	.29	.32	.30	.27	.31	.29
MGO	6.11	10.01	12.58	12.44	12.37	13.36
CAO	13.17	14.89	16.92	16.49	16.93	13.97
NA2O	.08	.10	.09	.11	.11	.11
TOTAL	102.60	102.81	99.75	99.10	96.92	100.15
SI IV	1.876	1.804	1.803	1.842	1.792	1.792
AL IV	.124	.192	.181	.158	.194	.194
AL VI	.013	-	-	.017	-	-
CR VI	.011	.012	.012	.013	.013	.013
TI VI	.076	.104	.101	.082	.090	.090
FE VI	.952	.690	.477	.468	.486	.486
MG VI	.356	.567	.718	.711	.728	.728
MN VI	.010	.010	.010	.009	.010	.010
CA VI	.552	.606	.694	.677	.716	.716
NA VI	.006	.007	.007	.008	.008	.008
WO	.297	.325	.368	.365	.375	.375
EN	.192	.304	.380	.383	.381	.381
FS	.512	.370	.252	.252	.244	.244

	G1G0LPA110	G1G0LPA111	G1G0LPA113	G1G0LPA114	G1G0LPA115	G1G0LPA116
SIO2	48.44	47.41	47.91	47.91	47.97	48.62
TIO2	3.05	3.45	3.08	2.99	3.12	2.69
AL2O3	3.74	3.79	3.41	3.31	3.75	3.05
CR2O3	.37	.29	.29	.26	.25	.23
FEO	13.68	13.63	13.71	13.29	14.25	15.30
MNO	.37	.36	.44	.48	.56	.45
MGO	12.41	12.36	12.22	12.13	12.33	12.22
CAO	17.60	18.12	17.48	18.26	17.56	17.13
NA2O	.09	.06	.05	.07	.06	.07
TOTAL	99.76	99.46	98.59	98.71	99.86	99.77
SI IV	1.823	1.843	1.847	1.846	1.831	1.861
AL IV	.175	.157	.153	.150	.169	.138
AL VI	-	.010	.002	-	-	-
CR VI	.012	.011	.009	.008	.008	.007
TI VI	.088	.087	.089	.087	.090	.077
FE VI	.553	.435	.442	.428	.455	.490
MG VI	.760	.704	.702	.697	.701	.697
MN VI	.009	.012	.014	.016	.018	.015
CA VI	.571	.717	.722	.754	.718	.703
NA VI	.008	.007	.004	.005	.004	.005
WO	.303	.386	.387	.401	.383	.372
EN	.403	.379	.376	.371	.374	.369
FS	.293	.234	.237	.228	.243	.259

TABLE 9. CONTINUED

	G1G0LPA117	G1G0LPA118	G1G0LPA119	G1G0LPA120	G1G0LPA121	G1G0LPA301
SIO2	49.49	49.19	50.13	47.94	48.05	47.94
TIO2	1.90	1.44	1.29	2.71	2.41	2.71
AL2O3	2.65	1.87	1.97	3.68	3.30	3.68
CR2O3	.23	.24	.22	.37	.40	.37
FEO	16.35	17.86	20.55	16.21	15.33	16.21
MNO	.46	.44	.44	.40	.35	.40
MGO	12.63	12.67	12.75	12.51	11.92	12.51
CAO	16.22	13.43	12.73	16.05	17.39	16.05
NA2O	.07	.04	.05	.08	.09	.08
TOTAL	100.01	97.19	100.11	99.95	99.24	99.95
SI IV	1.890	1.932	1.926	1.917	1.921	1.835
AL IV	.110	.068	.074	.083	.079	.165
AL VI	.009	.019	.015	.007	.008	.001
CR VI	.007	.008	.007	.006	.007	.011
TI VI	.055	.042	.037	.040	.038	.078
FE VI	.522	.587	.660	.760	.844	.519
MG VI	.719	.742	.730	.720	.633	.714
MN VI	.015	.015	.014	.015	.016	.013
CA VI	.664	.565	.524	.445	.447	.658
NA VI	.005	.003	.004	.003	.005	.006
WO	.348	.298	.274	.231	.232	.348
EN	.377	.392	.381	.374	.329	.377
FS	.274	.310	.345	.395	.439	.274

	G1G0LPA302	G1G0LPA303	G1G0LPA304	G1G0LPA305	G1G0LPA306	G1G0LPA307
SIO2	48.05	48.70	49.40	50.11	49.09	47.46
TIO2	2.41	2.91	2.34	1.50	1.29	1.19
AL2O3	3.30	3.59	3.12	2.19	1.83	1.47
CR2O3	.40	.40	.39	.35	.30	.22
FEO	15.33	18.91	19.35	24.62	29.72	33.35
MNO	.35	.31	.48	.47	.55	.62
MGO	11.92	12.85	12.31	12.56	8.30	3.42
CAO	17.39	13.08	13.47	9.74	10.20	10.60
NA2O	.09	.11	.07	.07	.05	.05
TOTAL	99.24	100.85	100.94	101.61	101.33	98.37
SI IV	1.852	1.850	1.879	1.915	1.933	1.971
AL IV	.148	.150	.121	.085	.067	.029
AL VI	.002	.011	.019	.014	.018	.043
CR VI	.012	.012	.012	.011	.009	.007
TI VI	.070	.083	.067	.043	.038	.037
FE VI	.494	.601	.616	.787	.979	1.158
MG VI	.685	.728	.698	.716	.487	.212
MN VI	.011	.010	.015	.015	.018	.022
CA VI	.718	.532	.549	.399	.430	.472
NA VI	.007	.008	.005	.005	.004	.004
WO	.379	.286	.295	.210	.227	.256
EN	.361	.391	.375	.376	.257	.115
FS	.260	.323	.331	.414	.516	.629

TABLE 10. PYROXENE ANALYSES - V. TRAVERSES IN FRAGMENT D

	G1G0LPD101	G1G0LPD102	G1G0LPD103	G1G0LPD104	G1G0LPD105	G1G0LPD106
SIO2	49.02	49.03	49.49	48.92	48.71	49.44
TIO2	1.39	1.41	1.53	1.48	1.39	1.41
AL2O3	2.17	2.18	2.19	2.10	2.16	2.05
CR2O3	.29	.29	.26	.23	.25	.27
FEO	21.14	21.55	21.57	21.89	22.29	23.63
MNO	.40	.44	.41	.46	.41	.38
MGO	12.98	12.55	12.72	12.48	12.45	11.73
CAO	12.07	12.03	12.06	12.04	11.96	11.54
NA2O	.07	.07	.06	.06	.06	.06
TOTAL	99.53	99.54	100.29	99.65	99.68	100.51
SI IV	1.902	1.905	1.906	1.902	1.897	1.915
AL IV	.099	.095	.094	.098	.099	.085
AL VI	.001	.005	.005	-	-	.008
CR VI	.009	.009	.008	.007	.008	.008
TI VI	.041	.041	.044	.043	.041	.041
FE VI	.686	.700	.695	.712	.726	.765
MG VI	.751	.727	.730	.723	.723	.677
MN VI	.013	.015	.013	.015	.014	.012
CA VI	.502	.501	.498	.502	.499	.479
NA VI	.005	.005	.004	.004	.004	.004
WO	.259	.260	.259	.259	.256	.249
EN	.387	.377	.380	.373	.371	.352
FS	.354	.363	.361	.368	.373	.398

	G1G0LPD107	G1G0LPD108	G1G0LPD109	G1G0LPD110	G1G0LPD111	G1G0LPD112
SIO2	48.83	49.07	49.58	49.26	49.67	50.02
TIO2	1.47	1.57	1.61	1.59	1.77	1.81
AL2O3	2.05	2.25	2.19	2.30	2.34	2.48
CR2O3	.30	.32	.31	.33	.30	.32
FEO	22.56	21.42	20.15	19.44	18.79	18.84
MNO	.36	.36	.37	.34	.33	.37
MGO	11.34	12.30	12.44	13.08	13.41	14.31
CAO	13.02	13.00	12.88	13.72	13.91	13.13
NA2O	.08	.07	.04	.04	.07	.08
TOTAL	100.01	100.36	99.57	100.10	100.59	101.36
SI IV	1.903	1.895	1.915	1.893	1.893	1.887
AL IV	.094	.102	.085	.104	.105	.110
AL VI	-	-	.014	-	-	-
CR VI	.009	.010	.010	.010	.009	.010
TI VI	.043	.046	.047	.046	.051	.051
FE VI	.735	.692	.651	.625	.599	.594
MG VI	.659	.708	.716	.749	.762	.804
MN VI	.012	.012	.012	.011	.011	.012
CA VI	.544	.538	.533	.565	.568	.531
NA VI	.006	.005	.003	.003	.005	.006
WO	.281	.278	.281	.291	.294	.275
EN	.340	.365	.377	.386	.395	.417
FS	.379	.357	.343	.322	.311	.308

TABLE 10 CONTINUED

	G1G0LPD113	G1G0LPD114	G1G0LPD115	G1G0LPD116	G1G0LPD201	G1G0LPD202
SIO2	50.39	49.69	49.72	49.91	49.43	49.28
TIO2	1.71	1.97	1.88	1.91	1.39	1.42
AL2O3	2.43	2.55	2.61	2.63	1.95	2.05
CR2O3	.33	.34	.34	.37	.25	.28
FEO	19.19	19.15	19.02	18.90	22.92	23.11
MNO	.41	.37	.36	.36	.42	.44
MGO	14.54	14.52	14.75	14.83	11.43	11.88
CAO	12.39	12.18	11.94	11.81	11.15	12.26
NA2O	.07	.07	.12	.11	.07	.07
TOTAL	101.44	100.82	100.74	100.82	99.01	100.77
SI IV	1.896	1.883	1.883	1.886	1.935	1.904
AL IV	.104	.114	.117	.114	.065	.093
AL VI	.004	-	-	.003	.025	-
CR VI	.010	.010	.010	.011	.008	.009
TI VI	.048	.056	.054	.054	.041	.041
FE VI	.604	.607	.602	.597	.750	.747
MG VI	.815	.820	.833	.835	.667	.684
MN VI	.013	.012	.012	.012	.014	.014
CA VI	.500	.495	.485	.478	.468	.508
NA VI	.005	.005	.009	.008	.005	.005
WO	.260	.257	.252	.250	.248	.262
EN	.425	.427	.434	.437	.354	.353
FS	.315	.316	.314	.313	.398	.385

	G1G0LPD203	G1G0LPD204	G1G0LPD205	G1G0LPD206	G1G0LPD207	G1G0LPD208
SIO2	50.39	49.71	49.60	50.04	49.61	49.96
TIO2	1.65	1.51	1.77	1.43	1.25	1.61
AL2O3	2.26	2.21	2.47	1.92	1.51	2.24
CR2O3	.28	.30	.30	.35	.31	.28
FEO	21.61	21.45	20.09	18.33	23.28	18.45
MNO	.41	.39	.38	.39	.34	.44
MGO	11.91	12.06	13.49	13.59	14.01	12.76
CAO	11.96	12.58	13.09	14.21	9.64	15.07
NA2O	.07	.06	.08	.05	.07	.05
TOTAL	100.54	100.28	101.25	100.31	100.02	100.88
SI IV	1.930	1.915	1.885	1.910	1.918	1.901
AL IV	.070	.085	.111	.086	.069	.099
AL VI	.032	.015	-	-	-	.002
CR VI	.008	.009	.009	.011	.010	.008
TI VI	.047	.044	.051	.041	.036	.046
FE VI	.692	.691	.638	.585	.753	.587
MG VI	.680	.693	.764	.773	.807	.724
MN VI	.013	.013	.012	.013	.011	.014
CA VI	.491	.519	.532	.581	.399	.615
NA VI	.005	.004	.006	.004	.005	.004
WO	.263	.273	.275	.300	.204	.319
EN	.365	.364	.395	.399	.412	.376
FS	.372	.363	.330	.302	.384	.305

TABLE 10 CONTINUED

	G1G0LPD209	G1G0LPD210	G1G0LPD211	G1G0LPD212	G1G0LPD213	G1G0LPD301
SIO2	49.88	48.19	49.12	49.12	49.18	46.25
TIO2	1.54	1.52	1.69	1.72	1.43	.93
AL2O3	2.09	2.26	2.43	2.36	2.81	1.30
CR2O3	.30	.27	.31	.32	.27	.21
FEO	17.27	18.78	17.56	19.01	20.83	39.41
MNO	.38	.38	.35	.31	.33	.49
MGO	12.21	12.96	12.04	12.09	9.67	.79
CAO	16.17	14.37	14.73	15.17	16.47	10.81
NA2O	.08	.07	.10	.10	.07	.06
TOTAL	99.92	98.81	98.33	100.19	101.06	100.27
SI IV	1.912	1.880	1.911	1.890	1.896	1.946
AL IV	.088	.104	.089	.107	.104	.055
AL VI	.007	-	.022	-	.024	.010
CR VI	.009	.008	.010	.010	.008	.007
TI VI	.044	.045	.049	.050	.041	.029
FE VI	.554	.613	.571	.612	.672	1.386
MG VI	.698	.754	.698	.693	.556	.049
MN VI	.012	.013	.012	.010	.011	.018
CA VI	.664	.601	.614	.626	.680	.487
NA VI	.006	.005	.008	.008	.005	.005
WO	.347	.305	.326	.324	.357	.253
EN	.364	.383	.371	.359	.291	.026
FS	.289	.311	.303	.317	.352	.721

	G1G0LPD302	G1G0LPD303	G1G0LPD304	G1G0LPD305	G1G0LPD306	G1G0LPD307
SIO2	46.30	45.06	48.98	49.80	49.54	49.27
TIO2	.88	.82	1.33	1.50	1.56	1.81
AL2O3	1.24	1.28	1.85	2.22	2.30	2.61
CR2O3	.25	.27	.27	.09	.32	.31
FEO	43.54	39.88	27.31	26.70	24.44	21.99
MNO	.44	.39	.33	.37	.41	.35
MGO	.70	.75	8.46	9.89	11.55	12.86
CAO	7.33	9.13	11.35	11.05	11.24	11.65
NA2O	.06	.08	.06	.09	.06	.08
TOTAL	100.74	97.65	99.94	101.72	101.42	100.93
SI IV	1.954	1.951	1.940	1.925	1.906	1.887
AL IV	.046	.049	.060	.075	.094	.113
AL VI	.016	.016	.026	.026	.010	.005
CR VI	.008	.009	.008	.003	.010	.009
TI VI	.028	.027	.040	.044	.045	.052
FE VI	1.537	1.444	.905	.863	.786	.704
MG VI	.044	.048	.499	.570	.662	.734
MN VI	.016	.014	.011	.012	.013	.011
CA VI	.332	.424	.482	.458	.463	.478
NA VI	.005	.007	.005	.007	.004	.006
WO	.173	.221	.255	.242	.242	.249
EN	.023	.025	.265	.301	.346	.383
FS	.804	.754	.480	.457	.411	.367

TABLE 10 CONTINUED

	G1G0LPD308	G1G0LPD309	G1G0LPD310	G1G0LPD311	G1G0LPD312	G1G0LPD313
SIO2	50.28	49.86	50.64	50.40	50.46	50.63
TIO2	1.96	2.01	1.83	1.73	1.78	1.50
AL2O3	2.72	2.65	2.49	2.36	2.36	2.12
CR2O3	.33	.34	.36	.35	.34	.30
FEO	20.43	19.02	19.05	18.84	19.66	19.60
MNO	.36	.40	.37	.40	.41	.44
MGO	13.32	14.78	15.17	15.53	17.51	17.33
CAO	12.18	12.14	11.62	11.38	9.07	8.61
NA2O	.05	.07	.05	.05	.05	.04
TOTAL	101.64	101.25	101.58	101.04	101.64	100.57
SI IV	1.897	1.879	1.896	1.896	1.883	1.905
AL IV	.103	.118	.104	.104	.104	.094
AL VI	.018	-	.006	.001	-	-
CR VI	.010	.010	.011	.010	.010	.009
TI VI	.056	.057	.052	.049	.050	.042
FE VI	.645	.600	.597	.593	.613	.617
MG VI	.749	.830	.847	.871	.974	.972
MN VI	.012	.013	.012	.013	.013	.014
CA VI	.492	.490	.466	.459	.363	.347
NA VI	.004	.005	.004	.004	.004	.003
	-	-	-	-	-	-
WO	.261	.255	.244	.239	.186	.179
EN	.397	.432	.443	.453	.499	.502
FS	.342	.312	.312	.308	.315	.319

	G1G0LPD314	G1G0LPD315	G1G0LPD316	G1G0LPD317	G1G0LPD318	G1G0LPD319
SIO2	50.21	50.98	51.87	51.78	50.93	50.02
TIO2	1.53	1.61	1.26	1.21	1.51	2.06
AL2O3	2.12	2.16	1.85	1.81	2.15	2.84
CR2O3	.27	.28	.26	.34	.28	.34
FEO	19.14	18.62	21.74	22.08	21.79	20.73
MNO	.43	.32	.38	.39	.39	.36
MGO	17.26	16.61	17.88	17.94	17.11	15.71
CAO	9.22	10.34	6.56	6.63	7.30	9.43
NA2O	.04	.05	.03	.05	.04	.07
TOTAL	100.22	100.98	101.83	102.24	101.50	101.56
SI IV	1.897	1.909	1.928	1.922	1.908	1.878
AL IV	.094	.091	.072	.078	.092	.122
AL VI	-	.004	.009	.001	.003	.004
CR VI	.008	.008	.008	.010	.008	.010
TI VI	.044	.045	.035	.034	.042	.058
FE VI	.605	.583	.676	.685	.683	.651
MG VI	.972	.927	.991	.992	.955	.879
MN VI	.014	.010	.012	.012	.012	.011
CA VI	.373	.415	.261	.264	.293	.379
NA VI	.003	.004	.002	.004	.003	.005
	-	-	-	-	-	-
WO	.191	.216	.136	.136	.152	.199
EN	.498	.482	.514	.511	.495	.460
FS	.310	.303	.351	.353	.354	.341

TABLE 10 CONTINUED

	G1G0LPD320	G1G0LPD321	G1G0LPD322	G1G0LPD323	G1G0LPD324	G1G0LPD325
SIO2	49.18	49.48	50.26	50.59	49.57	49.83
TIO2	1.62	1.24	1.63	1.95	1.82	1.91
AL2O3	2.14	1.64	2.95	2.45	2.45	2.46
CR2O3	.35	.32	.31	.32	.44	.27
FEO	16.37	16.84	21.47	20.66	32.67	46.84
MNO	.37	.37	.36	.37	.31	.46
MGO	13.16	13.03	14.18	13.31	7.40	.55
CAO	16.12	15.81	10.62	12.07	7.98	.40
NA2O	.06	.04	.07	.05	.07	.04
TOTAL	99.37	98.77	101.84	101.76	102.71	102.75
SI IV	1.892	1.917	1.892	1.906	1.932	2.019
AL IV	.097	.075	.108	.094	.068	-
AL VI	-	-	.023	.015	.044	.118
CR VI	.011	.010	.009	.010	.014	.009
TI VI	.047	.036	.046	.055	.053	.058
FE VI	.527	.546	.676	.651	1.065	1.588
MG VI	.755	.752	.798	.748	.430	.033
MN VI	.012	.012	.012	.012	.010	.016
CA VI	.664	.656	.428	.487	.333	.017
NA VI	.004	.003	.005	.004	.005	.003
	-	-	-	-	-	-
WO	.341	.336	.225	.258	.182	.011
EN	.388	.385	.419	.396	.235	.020
FS	.271	.279	.356	.345	.583	.969

	G1G0LPD401	G1G0LPD402	G1G0LPD403	G1G0LPD404	G1G0LPD405	G1G0LPD406
SIO2	51.50	50.28	50.04	50.28	50.88	49.94
TIO2	1.51	2.04	2.07	1.57	1.74	1.76
AL2O3	2.08	3.09	3.05	2.34	2.55	2.39
CR2O3	.36	.49	.44	.38	.38	.33
FEO	19.78	18.81	16.86	18.04	18.71	18.66
MNO	.39	.33	.36	.35	.40	.37
MGO	15.89	16.51	15.60	16.59	16.76	16.47
CAO	10.07	10.53	12.43	10.92	10.34	10.37
NA2O	.05	.05	.06	.04	.05	.06
TOTAL	101.63	102.15	100.92	100.52	101.81	100.36
SI IV	1.922	1.867	1.875	1.893	1.891	1.887
AL IV	.078	.133	.125	.104	.109	.106
AL VI	.014	.002	.010	-	.003	-
CR VI	.011	.014	.013	.011	.011	.010
TI VI	.042	.057	.058	.044	.049	.050
FE VI	.617	.584	.528	.568	.582	.590
MG VI	.884	.914	.871	.931	.929	.928
MN VI	.012	.010	.011	.011	.013	.012
CA VI	.403	.419	.499	.441	.412	.420
NA VI	.004	.004	.004	.003	.004	.004
	-	-	-	-	-	-
WO	.212	.219	.263	.227	.214	.217
EN	.464	.477	.459	.480	.483	.479
FS	.324	.305	.278	.293	.303	.304

TABLE 10 CONTINUED

	G1G0LPD407	G1G0LPD408	G1G0LPD409	G1G0LPD410	G1G0LPD411	G1G0LPD603
SIO2	49.71	49.74	49.84	49.47	49.25	50.41
TIO2	1.87	1.96	1.70	1.52	1.39	1.48
AL2O3	2.59	2.62	2.25	2.10	2.00	2.20
CR2O3	.29	.27	.26	.26	.25	.37
FEO	19.02	18.74	18.74	19.51	22.47	20.33
MNO	.40	.34	.32	.35	.38	.30
MGO	16.09	15.13	14.69	13.90	12.18	15.87
CAO	10.68	11.96	12.39	13.14	12.34	9.61
NA2O	.05	.06	.04	.05	.07	.08
TOTAL	100.70	100.81	100.24	100.31	100.33	100.66
SI IV	1.877	1.880	1.897	1.894	1.907	1.891
AL IV	.115	.117	.101	.095	.091	.109
AL VI	-	-	-	-	-	.002
CR VI	.009	.008	.008	.008	.008	.010
TI VI	.053	.056	.049	.044	.041	.052
FE VI	.601	.592	.596	.625	.727	.498
MG VI	.906	.852	.833	.793	.703	.736
MN VI	.013	.011	.010	.011	.012	.010
CA VI	.432	.484	.505	.539	.512	.687
NA VI	.004	.004	.003	.004	.005	.005
WO	.223	.251	.261	.275	.264	.358
EN	.467	.442	.431	.405	.362	.383
FS	.310	.307	.308	.319	.375	.259

	G1G0LPD602	G1G0LPD603	G1G0LPD604	G1G0LPD701	G1G0LPD702	G1G0LPD703
SIO2	49.72	49.65	49.12	42.92	44.22	46.00
TIO2	1.80	1.82	1.46	1.46	.80	1.07
AL2O3	2.37	2.47	2.18	2.30	1.29	1.46
CR2O3	.38	.33	.24	.14	.11	.12
FEO	19.01	15.62	18.06	40.58	41.29	38.43
MNO	.29	.30	.34	.63	.57	.54
MGO	14.81	12.97	13.42	1.44	.89	.83
CAO	11.65	16.83	14.70	8.41	7.64	11.03
NA2O	.10	.07	.09	.05	.05	.05
TOTAL	100.12	100.06	99.60	97.94	96.89	99.52
SI IV	1.893	1.891	1.892	1.867	1.942	1.943
AL IV	.106	.109	.099	.118	.058	.057
AL VI	-	.002	-	-	.009	.016
CR VI	.011	.010	.007	.005	.004	.004
TI VI	.052	.052	.042	.048	.026	.034
FE VI	.605	.498	.582	1.476	1.516	1.358
MG VI	.841	.736	.770	.093	.058	.052
MN VI	.009	.010	.011	.023	.021	.019
CA VI	.475	.687	.606	.392	.359	.499
NA VI	.007	.005	.007	.004	.004	.004
WO	.247	.358	.310	.200	.186	.261
EN	.438	.383	.393	.048	.030	.027
FS	.315	.259	.297	.753	.784	.711

TABLE 10 CONTINUED

	G1G0LPD704
SIO2	45.02
TIO2	.97
AL2O3	1.33
CR2O3	.11
FEO	35.83
MNO	.63
MGO	1.09
CAO	13.58
NA2O	.04
TOTAL	98.60
SI IV	1.920
AL IV	.067
AL VI	-
CR VI	.004
TI VI	.031
FE VI	1.278
MG VI	.069
MN VI	.023
CA VI	.620
NA VI	.003
	-
WO	.315
EN	.035
FS	.649

TABLE 11. PLAGIOCLASE ANALYSES

	G3A2LF070D	G2A1LF142A	G3A2LF062A	G3A3LF009A	A3A1LF060A	A3A2LF094B
SIO2	48.86	49.86	48.98	48.95	47.05	48.68
AL203	30.95	30.61	29.43	30.73	32.88	31.67
FEO	1.03	1.10	2.11	.90	.81	.98
CAO	13.59	14.97	15.09	15.23	15.48	15.53
NA2O	1.73	2.06	2.21	1.86	2.22	1.84
K2O	1.76	.40	.29	.67	.26	.45
TOTAL	97.92	99.01	98.11	98.34	98.70	99.15
SI IV	2.290	2.305	2.302	2.283	2.191	2.253
AL IV	-	-	-	-	-	-
AL	1.710	1.668	1.630	1.689	1.804	1.727
FE	.040	.042	.083	.035	.032	.038
K	.105	.024	.017	.040	.015	.027
CA	.683	.741	.760	.761	.772	.770
NA	.157	.185	.201	.168	.200	.165
	-	-	-	-	-	-
OR	.111	.025	.018	.041	.016	.028
AB	.166	.194	.206	.174	.203	.172
AN	.722	.781	.776	.785	.782	.801

	A3A2LF100A	G3A2LF062B	G2A3LF060A	G3A2AF099A	G3A3AF026A	A3A2LF009A
SIO2	49.24	49.62	51.38	49.66	47.51	50.35
AL203	30.71	29.76	31.86	30.89	30.94	28.40
FEO	.77	1.40	.67	.69	.60	1.83
CAO	15.54	15.60	15.64	15.72	15.77	15.78
NA2O	2.13	2.15	2.38	2.29	2.02	2.00
K2O	.42	.19	.28	.25	.49	.15
TOTAL	98.81	98.72	102.20	99.50	97.33	98.51
SI IV	2.285	2.309	2.298	2.287	2.244	2.350
AL IV	-	-	-	-	-	-
AL	1.680	1.632	1.679	1.677	1.722	1.563
FE	.030	.055	.025	.027	.024	.071
K	.025	.011	.016	.015	.030	.009
CA	.773	.778	.749	.776	.798	.789
NA	.192	.194	.206	.204	.185	.181
	-	-	-	-	-	-
OR	.025	.011	.016	.015	.029	.009
AB	.194	.197	.212	.206	.183	.185
AN	.781	.791	.771	.780	.788	.806

TABLE 11 CONTINUED

	G2A3LF103A	G3A2AF075A	G3A2LF014A	G3A2LF026A	G1H0LF028B	G2A3LF016A
SIO2	53.07	48.12	48.95	46.72	48.14	51.79
AL203	31.15	31.86	30.89	32.91	31.48	31.61
FEO	.60	.64	.69	.43	1.07	.91
CAO	15.90	15.93	15.98	16.02	16.07	16.07
NA2O	1.95	2.22	2.09	1.90	1.75	1.94
K2O	.18	.25	.14	.15	.32	.26
TOTAL	102.84	99.02	98.74	98.13	98.84	102.57
SI IV	2.349	2.232	2.273	2.185	2.240	2.308
AL IV	-	-	-	-	-	-
AL	1.625	1.742	1.690	1.814	1.726	1.661
FE	.022	.025	.027	.017	.042	.034
K	.010	.015	.008	.009	.019	.015
CA	.754	.792	.795	.803	.801	.767
NA	.167	.200	.188	.172	.158	.168
	-	-	-	-	-	-
OR	.011	.015	.008	.009	.019	.016
AB	.180	.198	.190	.175	.161	.177
AN	.809	.787	.802	.816	.819	.808

	G3A3AF078A	G2A3LF101A	G3A2LF285A	G3A1LF045A	A3A4LF104A	G3A2LF013A
SIO2	48.24	47.31	46.77	49.42	48.39	50.10
AL203	30.86	33.59	31.04	32.04	31.94	30.35
FEO	1.18	.55	1.24	.75	.52	.96
CAO	16.08	16.18	16.34	16.37	16.39	16.41
NA2O	2.00	1.06	1.70	1.97	1.87	2.09
K2O	.27	.07	.26	.19	.23	.14
TOTAL	98.63	98.75	97.35	100.74	99.34	100.05
SI IV	2.252	2.189	2.217	2.250	2.235	2.299
AL IV	-	-	-	-	-	-
AL	1.698	1.832	1.734	1.720	1.739	1.641
FE	.046	.021	.049	.029	.020	.037
K	.016	.004	.016	.011	.014	.008
CA	.804	.802	.830	.799	.811	.807
NA	.181	.095	.156	.174	.168	.186
	-	-	-	-	-	-
OR	.016	.005	.016	.011	.014	.008
AB	.181	.106	.156	.177	.169	.186
AN	.803	.890	.828	.812	.817	.806

TABLE 11 CONTINUED

	A3A3LF018A	G2A3LF048A	G3A3AG011A	G3A3LF075A	G1H0LF022A	A3A3GF038A
SIO2	45.08	49.70	46.77	45.28	47.46	47.60
AL2O3	33.55	32.12	31.84	34.65	31.83	32.15
FEO	.53	.65	.48	.41	.89	.61
CAO	16.46	16.46	16.47	16.47	16.58	16.59
NA2O	1.72	1.69	1.87	1.76	1.53	1.76
K2O	.12	.20	.47	.16	.23	.15
TOTAL	97.46	100.81	97.90	98.73	98.52	98.86
SI IV	2.130	2.257	2.201	2.111	2.216	2.212
AL IV	-	-	-	-	-	-
AL	1.869	1.720	1.766	1.904	1.752	1.761
FE	.021	.025	.019	.016	.035	.024
K	.007	.012	.028	.010	.014	.009
CA	.833	.801	.830	.823	.830	.826
NA	.158	.149	.171	.159	.138	.159
OR	.007	.012	.027	.010	.014	.009
AB	.158	.155	.166	.161	.141	.160
AN	.835	.833	.807	.830	.845	.831

	A3A1FF051A	G1H0LF028A	G1B0LF001C	G1B0LF001B	G3A1CF017A	A3A1LF093A
SIO2	48.07	47.33	45.87	45.50	46.73	44.92
AL2O3	31.33	32.59	33.04	33.28	32.16	34.32
FEO	.81	.56	.40	.32	.65	.59
CAO	16.60	16.69	16.71	16.74	16.79	16.81
NA2O	1.85	1.73	1.71	1.64	1.80	1.73
K2O	.17	.10	.14	.21	.13	.17
TOTAL	98.83	98.99	97.87	97.69	98.25	98.53
SI IV	2.237	2.197	2.157	2.144	2.190	2.104
AL IV	-	-	-	-	-	-
AL	1.719	1.783	1.831	1.848	1.777	1.895
FE	.032	.022	.016	.013	.025	.023
K	.010	.006	.008	.013	.008	.010
CA	.828	.830	.842	.845	.843	.844
NA	.167	.156	.156	.150	.164	.157
OR	.010	.006	.008	.013	.008	.010
AB	.166	.157	.155	.149	.161	.155
AN	.824	.837	.837	.839	.831	.835

TABLE 11 CONTINUED

	A3A2LF129A	G2A3LF111A	G2A1LF085B	G3A2LF207A	A3A5LF052A	G3A1PF046A
SIO2	47.65	48.79	46.62	47.89	45.17	47.25
AL2O3	32.45	32.35	32.15	30.23	33.45	32.33
FEO	.52	.62	.58	1.22	.61	.69
CAO	16.81	16.84	16.85	16.88	16.91	16.91
NA2O	1.79	1.82	1.53	1.83	1.43	1.69
K2O	.15	.18	.10	.11	.28	.09
TOTAL	99.37	100.59	97.82	98.16	97.84	98.95
SI IV	2.204	2.228	2.192	2.251	2.130	2.197
AL IV	-	-	-	-	-	-
AL	1.769	1.741	1.781	1.675	1.859	1.772
FE	.020	.024	.023	.048	.024	.027
K	.009	.010	.006	.007	.017	.005
CA	.833	.824	.849	.850	.854	.843
NA	.160	.161	.139	.167	.131	.152
	-	-	-	-	-	-
OR	.009	.011	.006	.006	.017	.005
AB	.160	.162	.140	.163	.130	.152
AN	.831	.828	.854	.831	.853	.842

	G3A3LF066A	G3A1LF007A	G1H0LF022B	A3A3AF067A	A3A5LF120A	G1B0LF001D
SIO2	46.42	47.09	46.65	45.19	46.28	47.41
AL2O3	33.75	32.10	32.36	29.49	32.39	31.74
FEO	.65	.49	.81	4.18	.52	.63
CAO	16.91	16.92	17.02	17.03	17.08	17.13
NA2O	1.16	1.65	1.58	1.48	1.64	1.58
K2O	.10	.10	.12	.13	.11	.14
TOTAL	98.99	98.35	98.54	97.50	98.02	98.63
SI IV	2.155	2.201	2.182	2.181	2.175	2.212
AL IV	-	-	-	-	-	-
AL	1.846	1.769	1.784	1.677	1.794	1.746
FE	.025	.019	.032	.169	.020	.025
K	.006	.006	.007	.008	.007	.008
CA	.841	.848	.853	.881	.860	.856
NA	.104	.150	.143	.138	.149	.143
	-	-	-	-	-	-
OR	.006	.006	.007	.008	.006	.008
AB	.110	.149	.143	.135	.147	.142
AN	.884	.845	.850	.857	.846	.850

TABLE 11 CONTINUED

	G1H0LF005A	G3A2LF070B	G2A3LF055A	G3A2FF149A	A3A1LF085A	A3A5LF157A
SIO2	46.10	47.87	49.25	47.38	47.74	44.22
AL2O3	31.81	31.84	32.30	32.79	31.74	34.27
FEO	.70	.81	.62	.41	.87	.43
CAO	17.17	17.18	17.21	17.24	17.31	17.31
NA2O	1.37	1.59	1.47	1.72	.75	.92
K2O	.46	.10	.07	.13	.14	.18
TOTAL	97.61	99.39	100.92	99.67	98.54	97.33
SI IV	2.182	2.217	2.238	2.187	2.225	2.094
AL IV	-	-	-	-	-	-
AL	1.774	1.738	1.730	1.784	1.743	1.913
FE	.028	.031	.024	.016	.034	.017
K	.028	.006	.004	.008	.008	.011
CA	.871	.853	.838	.853	.864	.878
NA	.126	.143	.129	.154	.068	.084
OR	.027	.006	.004	.008	.009	.011
AB	.123	.143	.133	.152	.072	.087
AN	.850	.851	.862	.841	.919	.902

	A3A2LF094A	A3A3LF016A	A3A4LF091A	A3A4AF097A	G2A3LF105A	G3A2FF308B
SIO2	46.49	46.00	45.98	46.73	47.87	45.10
AL2O3	33.12	32.92	33.03	32.59	31.31	33.18
FEO	.60	.39	.50	.42	.78	.27
CAO	17.38	17.42	17.42	17.44	17.48	17.48
NA2O	1.45	1.63	1.47	1.36	.99	1.58
K2O	.10	.08	.10	.09	.07	.07
TOTAL	99.13	98.45	98.50	98.63	98.50	97.68
SI IV	2.161	2.154	2.152	2.180	2.233	2.130
AL IV	-	-	-	-	-	-
AL	1.814	1.817	1.822	1.792	1.722	1.847
FE	.023	.015	.020	.016	.030	.011
K	.006	.005	.006	.005	.004	.004
CA	.866	.874	.874	.872	.874	.885
NA	.131	.148	.133	.123	.090	.145
OR	.006	.005	.006	.005	.004	.004
AB	.130	.144	.132	.123	.093	.140
AN	.864	.851	.862	.872	.903	.856

TABLE 11 CONTINUED

	A3A3FF092A	A3A4AF148A	A3A2FF074A	G2A1LF101A	G3A2LF051A	A3A4AF077A
SIO2	45.95	46.31	45.99	46.69	46.53	46.45
AL2O3	32.29	33.44	32.63	32.78	33.11	33.56
FEO	.73	.41	.31	.76	.33	.41
CAO	17.53	17.55	17.57	17.58	17.58	17.59
NA2O	1.58	1.39	1.44	1.35	1.52	1.37
K2O	.06	.12	.06	.08	.10	.11
TOTAL	98.15	99.23	98.01	99.24	99.17	99.49
SI IV	2.163	2.150	2.162	2.170	2.161	2.150
AL IV	-	-	-	-	-	-
AL	1.791	1.830	1.808	1.795	1.812	1.831
FE	.029	.016	.012	.030	.013	.016
K	.004	.007	.004	.005	.006	.007
CA	.884	.873	.885	.875	.875	.872
NA	.144	.125	.131	.122	.137	.123
	-	-	-	-	-	-
OR	.003	.007	.004	.005	.006	.006
AB	.140	.124	.129	.121	.135	.123
AN	.857	.868	.868	.874	.860	.871

	G3A2LF479A	A3A4LF010A	G3A1AF025A	G1H0LF014A	G3A1LF034A	A3A5LF160A
SIO2	44.28	46.37	47.37	45.26	45.27	47.01
AL2O3	33.96	32.93	32.06	33.67	33.81	31.26
FEO	.72	.80	.58	.42	.48	.69
CAO	17.59	17.60	17.64	17.65	17.67	17.68
NA2O	1.42	1.18	1.40	1.31	1.28	1.29
K2O	.24	.11	.10	.44	.08	.07
TOTAL	98.21	98.99	99.13	98.75	98.60	97.99
SI IV	2.089	2.161	2.200	2.119	2.119	2.211
AL IV	-	-	-	-	-	-
AL	1.888	1.808	1.755	1.858	1.865	1.733
FE	.028	.031	.022	.016	.019	.027
K	.014	.007	.006	.026	.005	.004
CA	.889	.879	.878	.885	.886	.891
NA	.130	.107	.126	.119	.116	.118
	-	-	-	-	-	-
OR	.014	.007	.006	.026	.005	.004
AB	.126	.107	.125	.115	.115	.116
AN	.860	.886	.869	.859	.880	.880

TABLE 11 CONTINUED

	G3A2LF011A	G2A3LF057A	G3A2FF308A	G3A2LF028A	G1B0LF002B	A3A3LF144A
SIO2	45.51	48.67	45.62	45.34	46.15	46.26
AL203	33.69	32.18	32.76	34.28	32.52	33.04
FE0	.52	.46	.28	.30	1.07	.52
CA0	17.69	17.72	17.73	17.74	17.76	17.77
NA20	1.39	1.06	1.46	1.29	1.27	1.44
K20	.06	.07	.06	.06	.07	.05
TOTAL	98.86	100.17	97.91	99.01	98.84	99.10
SI IV	2.125	2.229	2.149	2.111	2.159	2.154
AL IV	-	-	-	-	-	-
AL	1.854	1.737	1.819	1.881	1.793	1.813
FE	.020	.018	.011	.012	.042	.020
K	.004	.004	.004	.004	.004	.003
CA	.885	.870	.895	.885	.890	.886
NA	.126	.094	.133	.116	.115	.130
OR	.004	.004	.003	.004	.004	.003
AB	.124	.097	.129	.116	.114	.128
AN	.872	.899	.867	.881	.882	.870

	G3A2LF427A	G3A2LF161A	A3A5LF079A	G1H0LF014B	A3A3AF007A	G2A3LF065A
SIO2	45.68	44.90	44.62	45.63	45.90	47.17
AL203	32.74	32.86	34.34	33.40	32.95	33.45
FE0	.61	.38	.34	.42	.71	.27
CA0	17.77	17.78	17.80	17.80	17.83	17.84
NA20	1.46	1.46	1.19	1.23	1.37	1.28
K20	.08	.06	.07	.42	.04	.06
TOTAL	98.34	97.44	98.36	98.91	98.80	100.07
SI IV	2.146	2.129	2.094	2.132	2.146	2.168
AL IV	-	-	-	-	-	-
AL	1.813	1.836	1.899	1.840	1.816	1.812
FE	.024	.015	.013	.016	.028	.010
K	.005	.004	.004	.025	.002	.004
CA	.895	.903	.895	.891	.893	.878
NA	.133	.134	.108	.111	.124	.114
OR	.005	.003	.004	.024	.002	.004
AB	.129	.129	.108	.108	.122	.114
AN	.867	.868	.888	.867	.876	.882

TABLE 11 CONTINUED

	G1H0LF015A	G2A3LF116A	A3A4LF161A	G1B0LF003B	G3A2LF070C	G2A1LF037A
SIO2	45.44	45.98	46.12	46.12	46.70	45.59
AL203	32.30	34.55	33.47	32.96	32.79	33.58
FEO	.67	.52	.52	.54	.60	.60
CAO	17.85	17.89	17.92	17.92	17.92	17.93
NA20	1.31	.98	1.22	1.07	1.32	1.12
K20	.43	.06	.20	.09	.05	.05
TOTAL	97.99	99.99	99.46	98.70	99.38	98.86
SI IV	2.148	2.118	2.141	2.154	2.167	2.128
AL IV	-	-	-	-	-	-
AL	1.800	1.876	1.831	1.815	1.794	1.848
FE	.027	.020	.020	.021	.023	.023
K	.026	.004	.012	.005	.003	.003
CA	.904	.883	.891	.897	.891	.897
NA	.120	.088	.110	.097	.119	.101
	-	-	-	-	-	-
OR	.025	.004	.012	.005	.003	.003
AB	.114	.090	.108	.097	.117	.101
AN	.861	.907	.880	.898	.880	.896

	A3A2AF066A	G1B0LF006A	A3A4LF058A	A3A4LF127A	G3A3LF047A	A3A3AF136A
SIO2	45.58	44.43	45.84	46.96	45.90	45.65
AL203	32.78	34.45	33.00	32.49	33.95	32.96
FEO	.51	.61	.75	.91	.50	.58
CAO	17.94	17.94	17.95	17.96	17.97	17.99
NA20	1.25	1.18	1.27	1.20	1.15	1.38
K20	.08	.09	.14	.06	.12	.05
TOTAL	98.15	98.69	98.95	99.58	99.59	98.60
SI IV	2.145	2.082	2.142	2.177	2.126	2.139
AL IV	-	-	-	-	-	-
AL	1.818	1.903	1.817	1.775	1.854	1.821
FE	.020	.024	.029	.035	.019	.023
K	.005	.005	.008	.004	.007	.003
CA	.904	.901	.899	.892	.892	.903
NA	.114	.107	.115	.108	.103	.125
	-	-	-	-	-	-
OR	.005	.005	.008	.003	.007	.003
AB	.111	.106	.113	.108	.103	.122
AN	.884	.889	.879	.889	.890	.876

TABLE II CONTINUED

	A3A4FF137A	G3A2AF037A	G1H0LF043A	G3A2LF051B	G2A3LF048B	A3A1AF015A
SI02	46.10	45.17	44.97	45.07	44.18	44.90
AL203	33.72	33.10	33.90	33.66	34.06	34.77
FE0	.31	1.24	.53	.27	.26	.28
CA0	18.00	18.01	18.03	18.05	18.06	18.07
NA20	1.18	1.29	1.03	1.26	.98	1.25
K20	.11	.12	.05	.06	.05	.07
TOTAL	99.42	98.93	98.51	98.37	97.60	99.33
SI IV	2.137	2.119	2.108	2.115	2.090	2.087
AL IV	-	-	-	-	-	-
AL	1.842	1.830	1.873	1.862	1.899	1.905
FE	.012	.049	.021	.011	.010	.011
K	.007	.007	.003	.004	.003	.004
CA	.894	.905	.906	.908	.915	.900
NA	.106	.117	.094	.115	.090	.113
OR	.006	.007	.003	.004	.003	.004
AB	.105	.114	.093	.112	.089	.111
AN	.888	.879	.904	.885	.908	.885

	A3A3AF059A	A3A4AF076A	A3A2LF092A	G3A1LF042A	G1B0LF001A	A3A4AF109A
SI02	44.69	44.99	45.33	45.44	45.02	44.73
AL203	32.83	34.44	33.16	33.85	33.55	33.84
FE0	.28	.41	.46	.40	.31	.39
CA0	18.07	18.07	18.08	18.09	18.10	18.11
NA20	1.15	.81	1.11	1.02	1.11	1.00
K20	.06	.09	.08	.06	.07	.08
TOTAL	97.08	98.81	98.22	98.85	98.16	98.15
SI IV	2.126	2.100	2.131	2.120	2.117	2.104
AL IV	-	-	-	-	-	-
AL	1.841	1.894	1.837	1.861	1.859	1.877
FE	.011	.016	.018	.016	.012	.015
K	.004	.005	.005	.004	.004	.005
CA	.921	.904	.911	.904	.912	.913
NA	.106	.073	.101	.092	.101	.091
OR	.003	.005	.005	.004	.004	.005
AB	.103	.075	.100	.092	.099	.090
AN	.894	.920	.896	.904	.896	.905

TABLE 11 CONTINUED

	G2A1LF085A	A3A3AF071A	G1B0LF003A	G3A3LF080A	A3A5LF073A	G3A3LF073A
SIO2	45.62	43.09	45.03	45.11	44.08	45.50
AL2O3	33.60	33.39	33.72	35.13	33.90	33.84
FEO	.47	.42	.37	.31	.50	.46
CAO	18.11	18.12	18.12	18.12	18.14	18.15
NA2O	1.06	1.10	1.06	.97	.98	1.08
K2O	.06	.08	.05	.06	.04	.10
TOTAL	98.92	96.20	98.36	99.70	97.65	99.13
SI IV	2.128	2.076	2.113	2.086	2.088	2.119
AL IV	-	-	-	-	-	-
AL	1.847	1.896	1.865	1.915	1.892	1.858
FE	.018	.017	.015	.012	.020	.018
K	.004	.005	.003	.004	.002	.006
CA	.905	.935	.911	.898	.921	.906
NA	.096	.103	.096	.087	.090	.098
OR	.004	.005	.003	.004	.002	.006
AB	.095	.098	.095	.088	.089	.097
AN	.901	.897	.902	.908	.909	.898

	A3A2AF026A	A3A2LF149A	G1B0LF002A	A3A3LF128A	A3A3AF146A	A3A4LF075A
SIO2	45.20	45.90	45.56	44.56	46.03	45.35
AL2O3	33.97	33.80	33.91	34.39	32.58	33.86
FEO	.33	.71	.54	.61	2.14	.34
CAO	18.16	18.16	18.17	18.18	18.19	18.20
NA2O	1.23	.97	1.02	1.18	1.12	1.00
K2O	.09	.08	.08	.12	.10	.04
TOTAL	98.98	99.62	99.29	99.03	100.16	98.80
SI IV	2.109	2.127	2.119	2.083	2.140	2.117
AL IV	-	-	-	-	-	-
AL	1.868	1.846	1.859	1.895	1.785	1.863
FE	.013	.028	.021	.024	.083	.013
K	.005	.005	.005	.007	.006	.002
CA	.908	.902	.905	.911	.906	.911
NA	.111	.087	.092	.107	.101	.090
OR	.005	.005	.005	.007	.006	.002
AB	.109	.088	.092	.104	.100	.090
AN	.886	.908	.903	.889	.894	.907

TABLE 11 CONTINUED

	A3A2AF069A	A3A4LF079A	G1B0LF007C	G2A3LF118A	A3A5LF132A	A3A5CF205A
SIO2	45.96	45.41	43.99	46.16	45.09	43.57
AL203	33.01	34.38	34.46	33.49	34.20	34.24
FEO	.77	.26	.47	.66	.40	.43
CAO	18.21	18.22	18.22	18.22	18.23	18.23
NA2O	1.02	1.07	.93	.97	.98	.44
K2O	.08	.07	.06	.09	.06	.08
TOTAL	99.04	99.42	98.13	99.59	98.98	97.00
SI IV	2.144	2.107	2.073	2.139	2.103	2.074
AL IV	-	-	-	-	-	-
AL	1.815	1.880	1.914	1.830	1.880	1.921
FE	.030	.010	.019	.026	.016	.017
K	.005	.004	.004	.005	.004	.005
CA	.910	.906	.920	.905	.911	.930
NA	.092	.096	.085	.087	.089	.041
OR	.005	.004	.004	.005	.004	.005
AB	.092	.096	.084	.087	.088	.042
AN	.904	.900	.912	.907	.908	.953

	G3A2LF029A	G1B0LF007B	G1B0LF004B	G2A1LF078A	G2A3LF080A	G1B0LF003C
SIO2	45.42	44.85	44.52	45.16	45.65	44.67
AL203	33.23	33.82	33.96	33.69	33.84	34.10
FEO	.38	.54	.63	.57	.90	.59
CAO	18.23	18.25	18.26	18.26	18.26	18.27
NA2O	1.17	1.10	.91	.98	.97	.97
K2O	.05	.11	.10	.06	.07	.05
TOTAL	98.48	98.67	98.36	98.70	99.69	98.64
SI IV	2.130	2.103	2.094	2.114	2.118	2.094
AL IV	-	-	-	-	-	-
AL	1.837	1.869	1.882	1.859	1.850	1.884
FE	.015	.021	.025	.022	.035	.023
K	.003	.007	.006	.004	.004	.003
CA	.916	.917	.920	.916	.908	.918
NA	.106	.100	.083	.089	.087	.088
OR	.003	.006	.006	.004	.004	.003
AB	.104	.098	.082	.088	.087	.087
AN	.893	.896	.912	.908	.909	.910

TABLE 11 CONTINUED

	A3A1LF028A	A3A4LF135A	G1H0LF04 A	G2A1AF087B	G3A1LF020A	G3A1LF128A
SIO2	45.40	45.75	45.05	44.92	46.79	44.41
AL203	33.96	34.39	34.22	34.25	32.80	34.42
FEO	.49	.51	.39	.37	.39	.31
CAO	18.28	18.29	18.29	18.29	18.29	18.29
NA2O	1.06	1.01	.94	1.02	1.07	1.16
K2O	.12	.06	.04	.09	.08	.07
TOTAL	99.32	100.02	98.94	98.95	99.43	98.67
SI IV	2.112	2.111	2.102	2.097	2.169	2.081
AL IV	-	-	-	-	-	-
AL	1.862	1.871	1.882	1.885	1.792	1.901
FE	.019	.020	.015	.014	.015	.012
K	.007	.004	.002	.005	.005	.004
CA	.911	.904	.914	.915	.908	.918
NA	.096	.090	.085	.092	.096	.105
OR	.007	.004	.002	.005	.005	.004
AB	.094	.091	.085	.091	.095	.103
AN	.899	.906	.913	.904	.900	.893

	A3A4LF104B	G3A1LF006A	A3A2LF035A	G1H0LF032A	G2A3LF029A	A3A3LF039A
SIO2	45.02	44.48	44.39	46.65	44.35	44.65
AL203	34.47	34.31	34.15	32.15	34.32	34.06
FEO	.38	.29	.39	.75	.53	.48
CAO	18.30	18.31	18.32	18.33	18.34	18.36
NA2O	.98	.97	1.03	.90	1.00	1.03
K2O	.05	.07	.08	.03	.03	.04
TOTAL	99.20	98.44	98.37	98.80	98.57	98.62
SI IV	2.095	2.088	2.087	2.179	2.081	2.094
AL IV	-	-	-	-	-	-
AL	1.891	1.898	1.892	1.770	1.898	1.882
FE	.015	.011	.015	.029	.021	.019
K	.003	.004	.005	.002	.002	.002
CA	.913	.921	.923	.917	.922	.922
NA	.088	.088	.094	.082	.091	.094
OR	.003	.004	.005	.002	.002	.002
AB	.088	.087	.092	.081	.090	.092
AN	.909	.909	.903	.917	.909	.906

TABLE 11 CONTINUED

	G1H0LF015B	G2A1LF072A	A3A3AF135A	G2A3AF076A	G3A2LF012A	G2A1AF087A
SIO2	44.01	45.06	43.17	46.99	45.00	44.69
AL203	33.84	34.19	34.88	33.50	33.91	34.29
FEO	.40	.79	.35	.69	.89	.35
CAO	18.37	18.37	18.38	18.38	18.38	18.39
NA20	1.03	.92	.31	1.03	.99	.90
K20	.42	.04	.02	.06	.07	.06
TOTAL	98.07	99.37	97.11	100.65	99.24	98.68
SI IV	2.082	2.098	2.052	2.154	2.100	2.092
AL IV	-	-	-	-	-	-
AL	1.887	1.876	1.954	1.810	1.866	1.892
FE	.016	.031	.014	.027	.035	.014
K	.025	.002	.001	.004	.004	.004
CA	.931	.916	.936	.903	.919	.922
NA	.094	.083	.029	.092	.090	.082
	-	-	-	-	-	-
OR	.024	.002	.001	.004	.004	.004
AB	.090	.083	.030	.092	.088	.081
AN	.886	.915	.969	.905	.907	.915

	G3A2LF070A	G1B0LF007A	A3A3AF015A	A3A5LF174A	G1B0LF004C	G2A1LF115A
SIO2	45.77	43.58	45.12	43.17	44.55	44.79
AL203	33.81	34.00	33.28	33.17	34.38	34.00
FEO	.36	.67	.50	.39	.51	.46
CAO	18.39	18.40	18.41	18.41	18.41	18.41
NA20	1.11	.86	1.11	.82	.97	.92
K20	.05	.09	.06	.04	.09	.06
TOTAL	99.49	97.58	98.48	96.00	98.91	98.65
SI IV	2.124	2.070	2.119	2.082	2.084	2.099
AL IV	-	-	-	-	-	-
AL	1.849	1.903	1.842	1.886	1.895	1.878
FE	.014	.027	.020	.016	.020	.018
K	.003	.005	.004	.003	.005	.004
CA	.914	.936	.926	.951	.923	.924
NA	.100	.079	.101	.077	.088	.084
	-	-	-	-	-	-
OR	.003	.005	.003	.002	.005	.004
AB	.098	.078	.098	.074	.087	.083
AN	.899	.917	.898	.923	.908	.914

TABLE 11 CONTINUED

	G3A1LF085A	A3A4AF134A	A3A4LF036A	A3A1LF045C	A3A4LF101A	A3A1LF026A
SIO2	44.84	45.20	44.80	45.79	45.07	44.02
AL2O3	34.64	34.13	34.11	32.68	33.89	34.45
FEO	.38	.60	.71	.80	.45	.40
CAO	18.41	18.42	18.43	18.45	18.45	18.48
NA2O	1.09	.99	.95	1.07	.97	.69
K2O	.05	.08	.05	.11	.07	.06
TOTAL	99.41	99.41	99.04	98.90	98.91	98.11
SI IV	2.085	2.102	2.093	2.144	2.106	2.074
AL IV	-	-	-	-	-	-
AL	1.898	1.871	1.879	1.803	1.867	1.913
FE	.015	.023	.028	.031	.018	.016
K	.003	.005	.003	.007	.004	.004
CA	.917	.918	.923	.925	.924	.933
NA	.098	.089	.086	.097	.088	.063
	-	-	-	-	-	-
OR	.003	.005	.003	.006	.004	.004
AB	.097	.088	.085	.094	.087	.063
AN	.901	.907	.912	.899	.909	.933

	A3A4AF077B	A3A2AF130A	A3A3LF109A	G3A1LF016A	A3A3LF120A	A3A4LF103A
SIO2	45.35	45.03	44.33	45.00	44.22	45.08
AL2O3	34.45	34.41	34.02	33.96	33.91	34.72
FEO	.30	.53	.46	.36	.36	.36
CAO	18.49	18.50	18.51	18.51	18.52	18.52
NA2O	1.06	.97	1.12	.87	1.02	.82
K2O	.07	.05	.02	.04	.04	.08
TOTAL	99.72	99.50	98.46	98.74	98.07	99.58
SI IV	2.100	2.093	2.085	2.105	2.086	2.090
AL IV	-	-	-	-	-	-
AL	1.880	1.885	1.885	1.872	1.886	1.897
FE	.012	.021	.018	.014	.014	.014
K	.004	.003	.001	.002	.002	.005
CA	.918	.921	.933	.928	.936	.920
NA	.095	.087	.102	.079	.093	.074
	-	-	-	-	-	-
OR	.004	.003	.001	.002	.002	.005
AB	.094	.086	.099	.078	.090	.074
AN	.902	.911	.900	.919	.907	.921

TABLE 11 CONTINUED

	G1B0LF004A	G1H0LF016A	G1H0LF043B	A3A2LF159A	G2A3CF099A	G1B0LF005B
SIO2	44.30	43.96	44.86	44.78	45.10	43.93
AL2O3	33.85	34.27	34.53	34.30	34.63	34.37
FEO	.60	.36	.44	.58	.18	.49
CAO	18.52	18.52	18.54	18.56	18.56	18.58
NA2O	.98	.89	.91	.99	.99	.88
K2O	.09	.04	.05	.11	.02	.06
TOTAL	98.34	98.04	99.33	99.31	99.48	98.31
SI IV	2.087	2.074	2.088	2.088	2.092	2.069
AL IV	-	-	-	-	-	-
AL	1.880	1.906	1.894	1.885	1.894	1.908
FE	.024	.014	.017	.023	.007	.019
K	.005	.002	.003	.007	.001	.004
CA	.935	.936	.924	.927	.923	.938
NA	.089	.081	.082	.089	.089	.080
	-	-	-	-	-	-
OR	.005	.002	.003	.006	.001	.004
AB	.087	.080	.081	.087	.088	.079
AN	.908	.918	.916	.906	.911	.918

	G3A1CF071A	G1H0CF027A	G2A3LF060B	A3A1LF045D	G2A1LF137A	G3A2LF177A
SIO2	45.32	44.99	44.46	44.52	44.55	43.67
AL2O3	34.01	33.65	34.35	33.88	34.43	33.58
FEO	.42	.51	.34	.36	.45	.49
CAO	18.59	18.60	18.60	18.61	18.61	18.61
NA2O	.92	.67	.96	1.00	.88	1.05
K2O	.04	.07	.04	.09	.05	.04
TOTAL	99.30	98.50	98.76	98.46	98.97	97.44
SI IV	2.109	2.111	2.082	2.093	2.082	2.078
AL IV	-	-	-	-	-	-
AL	1.865	1.861	1.896	1.877	1.897	1.884
FE	.016	.020	.013	.014	.018	.019
K	.002	.004	.002	.005	.003	.002
CA	.927	.935	.933	.937	.932	.949
NA	.083	.061	.087	.091	.080	.097
	-	-	-	-	-	-
OR	.002	.004	.002	.005	.003	.002
AB	.082	.061	.085	.088	.079	.092
AN	.916	.935	.912	.907	.918	.905

TABLE 11 CONTINUED

	G3A3AF032A	A3A3FF084A	A3A1LF045B	G2A3LF040A	A3A3LF140A	A3A4LF015A
SIO2	44.95	42.63	44.76	44.77	45.98	44.63
AL2O3	34.28	32.78	33.91	34.26	33.47	34.57
FEO	.34	.86	.30	.52	.84	.38
CAO	18.62	18.63	18.65	18.65	18.66	18.66
NA2O	.99	.49	.93	.71	1.15	.89
K2O	.49	.04	.08	.13	.07	.04
TOTAL	99.68	95.43	98.63	99.05	100.16	99.17
SI IV	2.091	2.075	2.098	2.091	2.126	2.081
AL IV	-	-	-	-	-	-
AL	1.879	1.880	1.874	1.886	1.824	1.900
FE	.013	.035	.012	.020	.032	.015
K	.029	.003	.005	.008	.004	.002
CA	.928	.971	.937	.933	.925	.932
NA	.089	.046	.084	.064	.103	.081
	-	-	-	-	-	-
OR	.028	.002	.005	.008	.004	.002
AB	.085	.045	.082	.064	.100	.079
AN	.887	.952	.913	.928	.896	.918

	G1B0LF005A	A3A3LF137A	G1B0LF006B	G3A1LF136A	A3A1AF065A	G3A2LF154A
SIO2	44.12	44.58	44.67	44.81	43.87	43.02
AL2O3	34.09	34.30	34.67	33.93	33.93	33.95
FEO	.47	.68	.49	.37	.67	.35
CAO	18.66	18.67	18.67	18.67	18.69	18.70
NA2O	.84	.93	.78	.91	.96	1.01
K2O	.07	.04	.05	.05	.10	.04
TOTAL	98.25	99.19	99.33	98.74	98.22	97.07
SI IV	2.079	2.082	2.080	2.098	2.073	2.056
AL IV	-	-	-	-	-	-
AL	1.894	1.888	1.902	1.873	1.890	1.912
FE	.019	.027	.019	.015	.027	.014
K	.004	.002	.003	.003	.006	.002
CA	.942	.934	.931	.937	.946	.958
NA	.077	.084	.070	.083	.088	.094
	-	-	-	-	-	-
OR	.004	.002	.003	.003	.006	.002
AB	.075	.082	.070	.081	.085	.089
AN	.921	.915	.927	.916	.910	.909

TABLE 11 CONTINUED

	A3A3LF108A	G1H0LF016B	A3A3AF012A	G2A3CF024A	A3A2LF048A	A3A5AF015A
SI02	44.38	44.31	45.31	44.15	45.85	43.72
AL203	34.36	34.69	33.80	33.62	33.30	34.54
FE0	.38	.30	.53	.18	.62	.32
CA0	18.71	18.72	18.74	18.74	18.85	18.87
NA20	.89	.83	.95	.58	.91	.40
K20	.02	.02	.03	.03	.08	.06
TOTAL	98.75	98.87	99.38	97.31	99.60	97.91
SI IV	2.079	2.072	2.109	2.096	2.130	2.065
AL IV	-	-	-	-	-	-
AL	1.897	1.912	1.855	1.881	1.823	1.922
FE	.015	.012	.021	.007	.024	.013
K	.001	.001	.002	.002	.005	.004
CA	.939	.938	.935	.953	.938	.955
NA	.081	.075	.086	.053	.082	.037
	-	-	-	-	-	-
OR	.001	.001	.002	.002	.005	.004
AB	.079	.074	.084	.053	.080	.037
AN	.920	.925	.914	.945	.915	.960

	G2A1CF117A	G3A2LF152A	A3A4LF052A	A3A4LF010B	G2A1LF038A	G3A1AF123A
SI02	43.34	42.57	43.94	44.45	44.57	44.10
AL203	33.48	33.55	34.53	34.23	34.23	34.47
FE0	1.56	.61	.59	.70	.60	.38
CA0	18.89	18.91	18.93	18.94	18.98	18.99
NA20	.33	.88	.73	.71	.61	.81
K20	.04	.06	.05	.07	.02	.09
TOTAL	97.64	96.58	98.77	99.10	99.00	98.85
SI IV	2.067	2.050	2.062	2.079	2.084	2.067
AL IV	-	-	-	-	-	-
AL	1.882	1.904	1.910	1.887	1.886	1.905
FE	.062	.025	.023	.027	.023	.015
K	.002	.004	.003	.004	.001	.005
CA	.965	.976	.952	.949	.951	.954
NA	.031	.082	.066	.064	.055	.074
	-	-	-	-	-	-
OR	.002	.003	.003	.004	.001	.005
AB	.031	.077	.065	.063	.055	.071
AN	.967	.919	.932	.933	.944	.924

TABLE 11 CONTINUED

	A3A1AF068B	G2A3LF123A	G2A3LF119A	A3A1AF068A	A3A1FL026B	A3A1AF045A
SIO2	44.26	47.71	44.20	44.37	44.53	44.33
AL203	34.48	33.42	35.06	34.72	33.49	33.72
FEO	.51	.55	.61	.43	1.58	.64
CAO	19.02	19.03	19.05	19.06	19.12	19.12
NA20	.73	.73	.72	.80	.67	.79
K20	.11	.01	.05	.09	.11	.08
TOTAL	99.11	101.46	99.68	99.48	99.50	98.67
SI IV	2.070	2.168	2.055	2.067	2.086	2.085
AL IV	-	-	-	-	-	-
AL	1.900	1.790	1.921	1.906	1.849	1.869
FE	.020	.021	.024	.017	.062	.025
K	.007	.001	.003	.005	.007	.005
CA	.953	.926	.949	.951	.960	.963
NA	.066	.064	.065	.072	.061	.072
	-	-	-	-	-	-
OR	.006	.001	.003	.005	.006	.005
AB	.065	.065	.064	.070	.059	.069
AN	.929	.935	.933	.925	.934	.926

	G2A3LF015A	A3A1LF045A	A3A5LF084A	A3A1AF009B	A3A4AF162A	G1H0LF002A
SIO2	43.36	44.40	42.86	43.74	44.28	43.13
AL203	34.84	34.55	35.44	34.48	34.61	35.49
FEO	.20	.27	.34	.64	.42	.13
CAO	19.12	19.13	19.20	19.30	19.30	19.30
NA20	.48	.77	.33	.74	.38	.60
K20	.01	.09	.02	.08	.00	.51
TOTAL	98.01	99.21	98.19	98.97	99.01	99.16
SI IV	2.047	2.072	2.022	2.053	2.070	2.021
AL IV	-	-	-	-	-	-
AL	1.939	1.900	1.971	1.908	1.907	1.960
FE	.008	.010	.013	.025	.016	.005
K	.001	.005	.001	.005	-	.031
CA	.967	.957	.971	.971	.967	.969
NA	.044	.070	.030	.067	.034	.055
	-	-	-	-	-	-
OR	.001	.005	.001	.005	-	.029
AB	.043	.068	.030	.065	.034	.052
AN	.956	.927	.969	.931	.966	.919

TABLE 11 CONTINUED

	A3A5AF067A	A1B1CF003A	A3A2AF018A	A3A2AF056A	A3A5AF110A	A3A3AF147A
SIO2	41.88	42.86	43.53	42.86	43.07	43.65
AL203	34.42	35.52	34.33	33.70	35.72	34.17
FEO	.21	.03	.37	.69	.28	.30
CAO	19.31	19.33	19.34	19.37	19.38	19.39
NA20	.47	.44	.61	.15	.26	.62
K20	.05	.07	.06	.00	.01	.04
TOTAL	96.33	98.25	98.25	96.77	98.73	98.18
SI IV	2.019	2.020	2.056	2.056	2.020	2.062
AL IV	-	-	-	-	-	-
AL	1.956	1.973	1.911	1.905	1.975	1.902
FE	.008	.001	.015	.028	.011	.012
K	.003	.004	.004	-	.001	.002
CA	.997	.976	.979	.996	.974	.981
NA	.044	.040	.056	.014	.024	.057
	-	-	-	-	-	-
OR	.003	.004	.003	-	.001	.002
AB	.042	.039	.054	.014	.024	.055
AN	.955	.956	.943	.986	.976	.943

	A3A1FF087A	G3A2LF021A	A3A1AF009A	A3A3AF156A	A3A3AF164A	G3A1CF121A
SIO2	44.59	42.53	43.53	43.30	42.77	43.51
AL203	34.28	34.04	35.09	34.96	34.47	35.17
FEO	.36	.85	.43	.44	.32	.17
CAO	19.46	19.48	19.50	19.50	19.50	19.57
NA20	.47	.40	.61	.45	.39	.40
K20	.05	.00	.08	.08	.00	.04
TOTAL	99.21	97.30	99.24	98.74	97.47	98.87
SI IV	2.081	2.035	2.037	2.036	2.037	2.039
AL IV	-	-	-	-	-	-
AL	1.885	1.920	1.935	1.937	1.934	1.942
FE	.014	.034	.017	.017	.013	.007
K	.003	-	.005	.005	-	.002
CA	.973	.999	.977	.982	.995	.983
NA	.042	.037	.055	.041	.036	.036
	-	-	-	-	-	-
OR	.003	-	.005	.005	-	.002
AB	.042	.036	.053	.040	.035	.036
AN	.955	.964	.942	.955	.965	.962

TABLE 11 CONTINUED

	G3A2AF043A	G3A2LF227A	A3A1FF087B	G3A3AF012A	G3A2AF054B	A3A1AF025C
SIO2	43.49	42.62	44.05	43.58	42.50	43.61
AL203	35.32	33.95	34.52	35.95	34.72	35.25
FEO	.15	.42	.42	.11	.21	.17
CAO	19.58	19.58	19.61	19.61	19.62	19.65
NA20	.50	.43	.40	.55	.49	.56
K20	.01	.01	.06	.39	.00	.05
TOTAL	99.05	97.01	99.06	100.19	97.54	99.30
SI IV	2.034	2.042	2.062	2.020	2.023	2.037
AL IV	-	-	-	-	-	-
AL	1.947	1.917	1.904	1.964	1.948	1.940
FE	.006	.017	.016	.004	.008	.007
K	.001	.001	.004	.023	-	.003
CA	.981	1.005	.983	.974	1.001	.983
NA	.045	.040	.036	.049	.045	.051
OR	.001	.001	.004	.022	-	.003
AB	.044	.038	.035	.047	.043	.049
AN	.955	.961	.961	.931	.957	.948

	G3A2LF024A	A3A1AF025A	G3A1CF092A	G3A2LF165A	G3A1CF103A	A3A1AF025B
SIO2	43.41	43.54	43.24	42.38	43.14	43.50
AL203	35.66	35.30	35.43	34.53	35.38	35.29
FEO	.14	.14	.10	.25	.12	.15
CAO	19.70	19.72	19.72	19.72	19.73	19.74
NA20	.46	.52	.47	.29	.41	.53
K20	.02	.07	.02	.01	.01	.07
TOTAL	99.39	99.30	98.99	97.18	98.79	99.28
SI IV	2.024	2.034	2.025	2.025	2.024	2.032
AL IV	-	-	-	-	-	-
AL	1.960	1.943	1.956	1.944	1.957	1.943
FE	.005	.005	.004	.010	.005	.006
K	.001	.004	.001	.001	.001	.004
CA	.984	.987	.990	1.009	.992	.988
NA	.042	.047	.043	.027	.037	.048
OR	.001	.004	.001	.001	.001	.004
AB	.041	.045	.041	.026	.036	.046
AN	.958	.951	.958	.973	.963	.950

TABLE 11 CONTINUED

	G3A2LF024B	A3A1AF025D	G3A2LF356A	G3A2AF124A	A3A4FF278A	A3A3AF110A
SIO2	43.23	43.53	42.47	43.54	43.03	40.53
AL203	35.24	35.37	35.10	35.58	36.40	35.11
FEO	.15	.22	.36	.04	.12	.97
CAO	19.75	19.77	19.78	19.83	19.91	20.34
NA20	.48	.50	.43	.46	.25	.04
K20	.03	.06	.02	.03	.02	.00
TOTAL	98.88	99.45	98.16	99.48	99.73	96.99
SI IV	2.028	2.031	2.011	2.028	2.000	1.956
AL IV	-	-	-	-	-	-
AL	1.948	1.945	1.959	1.954	1.994	1.997
FE	.006	.009	.014	.002	.005	.039
K	.002	.004	.001	.002	.001	-
CA	.993	.988	1.004	.990	.992	1.052
NA	.044	.045	.039	.041	.022	.004
	-	-	-	-	-	-
OR	.002	.003	.001	.002	.001	-
AB	.042	.044	.038	.040	.022	.004
AN	.956	.953	.961	.958	.977	.996

TABLE 12. OLIVINE ANALYSES

	A3A3A0146A	A3A2C0057A	G3A2A0004A	G3A2A0376A	G1H000001A	A3A400107A
SIO2	38.73	37.73	36.70	36.59	38.21	36.63
AL2O3	.00	N.A.	N.A.	N.A.	.00	.02
CR2O3	.37	.05	N.A.	N.A.	.13	.18
FEO	22.28	25.33	27.07	27.64	27.76	28.02
MNO	.27	.23	.26	.29	.28	.31
MGO	38.39	36.84	34.35	34.68	34.86	34.57
NIO	.00	.00	N.A.	N.A.	.01	.00
CAO	.27	.81	.37	.31	.25	.36
TOTAL	100.31	100.99	98.75	99.51	101.50	100.09
SI IV	1.004	.988	.993	.985	1.004	.983
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	-
CR VI	.008	.001	-	-	.003	.004
FE VI	.483	.555	.612	.622	.610	.629
MG VI	1.484	1.439	1.385	1.392	1.365	1.382
MN VI	.006	.005	.006	.007	.006	.007
NI VI	-	-	-	-	-	-
CA VI	.008	.023	.011	.009	.007	.010
	-	-	-	-	-	-
FO	.754	.722	.693	.691	.691	.687
FA	.246	.278	.307	.309	.309	.313

	A3A400141A	G2A100110A	G3A1002048	G3A200041A	G1H0A0028A	A3A5A0182A
SIO2	36.30	36.34	36.40	36.51	38.32	36.59
AL2O3	.01	.00	.00	N.A.	.00	N.A.
CR2O3	.15	.00	.00	N.A.	.15	N.A.
FEO	28.29	28.37	28.46	28.66	28.78	28.85
MNO	.31	.33	.33	.31	.33	.36
MGO	34.31	33.78	34.08	33.05	33.80	32.62
NIO	.00	.00	N.A.	N.A.	.01	N.A.
CAO	.33	.34	.34	.48	.33	.45
TOTAL	99.70	99.16	99.61	99.01	101.72	98.87
SI IV	.980	.986	.984	.993	1.009	.998
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	-
CR VI	.003	-	-	-	.003	-
FE VI	.639	.644	.643	.652	.634	.658
MG VI	1.380	1.366	1.373	1.340	1.326	1.326
MN VI	.007	.008	.008	.007	.007	.008
NI VI	-	-	-	-	-	-
CA VI	.010	.010	.010	.014	.009	.013
	-	-	-	-	-	-
FO	.684	.680	.681	.673	.677	.668
FA	.316	.320	.319	.327	.323	.332

TABLE 12 CONTINUED

	62A1A0076A	A3A5A0182A	G3A100102B	A3A3A0005A	G1H0L0015A	A3A500194A
SIO2	36.10	36.48	35.82	37.84	38.06	36.26
AL2O3	.00	N.A.	.00	.00	.01	N.A.
CR2O3	.00	.00	.00	.15	.15	N.A.
FEO	28.86	29.06	29.07	29.08	29.10	29.17
MNO	.32	.35	.31	.33	.31	.35
MGO	33.35	33.46	33.40	33.60	33.20	32.81
NIO	.00	.00	N.A.	.01	.00	N.A.
CAO	.35	.00	.25	.33	.38	.40
TOTAL	98.98	99.35	98.85	101.34	101.21	98.99
SI IV	.984	.990	.980	1.003	1.010	.990
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	-
CR VI	-	-	-	.003	.003	-
FE VI	.658	.659	.665	.645	.645	.666
MG VI	1.355	1.353	1.361	1.328	1.313	1.335
MN VI	.007	.008	.007	.007	.007	.008
NI VI	-	-	-	-	-	-
CA VI	.010	-	.007	.009	.011	.012
	-	-	-	-	-	-
FO	.673	.672	.672	.673	.670	.667
FA	.327	.328	.328	.327	.330	.333

	63A200041C	G3A100204A	G1H0L0032A	A3A400116A	G1H0A0024A	G3A2L0213B
SIO2	35.85	35.95	38.28	36.39	38.21	35.76
AL2O3	N.A.	.00	.00	.01	.00	N.A.
CR2O3	N.A.	N.A.	.16	.15	.13	N.A.
FEO	29.20	29.27	29.46	29.47	29.56	29.69
MNO	.32	.32	.33	.32	.33	.39
MGO	32.38	32.97	32.96	33.70	32.97	32.75
NIO	N.A.	N.A.	.05	.04	.02	N.A.
CAO	.46	.37	.34	.33	.35	.80
TOTAL	98.21	98.88	101.58	100.41	101.57	99.39
SI IV	.988	.984	1.012	.980	1.011	.977
AL IV	-	-	-	-	-	-
AL VI	-	-	.002	.001	.001	-
CR VI	-	-	.003	.003	.003	-
FE VI	.673	.670	.652	.664	.654	.679
MG VI	1.330	1.345	1.299	1.353	1.301	1.334
MN VI	.008	.007	.007	.007	.007	.009
NI VI	-	-	-	-	-	-
CA VI	.014	.011	.010	.010	.010	.023
	-	-	-	-	-	-
FO	.664	.667	.666	.671	.665	.663
FA	.336	.333	.334	.329	.335	.337

TABLE 12 CONTINUED

	A3A4A0097A	G3A2L0213A	A3A500104A	A3A500115A	G3A1C0182A	G3A1A0177A
SIO2	36.15	36.15	36.26	35.98	36.29	35.93
AL2O3	.00	N.A.	N.A.	N.A.	.00	.00
CR2O3	.01	N.A.	N.A.	N.A.	N.A.	N.A.
FEO	29.78	29.81	30.11	30.15	30.25	30.33
MNO	.32	.34	.36	.36	.35	.35
MGO	32.85	32.68	32.75	32.83	31.48	31.85
NIO	.00	N.A.	N.A.	N.A.	N.A.	N.A.
CAO	.11	.34	.42	.41	.61	.41
TOTAL	99.22	99.32	99.90	99.73	98.98	98.87
SI IV	.987	.986	.985	.980	.996	.988
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	-
CR VI	-	-	-	-	-	-
FE VI	.680	.680	.684	.687	.694	.698
MG VI	1.336	1.329	1.326	1.333	1.288	1.306
MN VI	.007	.008	.008	.008	.008	.008
NI VI	-	-	-	-	-	-
CA VI	.003	.010	.012	.012	.018	.012
	-	-	-	-	-	-
FO	.663	.661	.660	.660	.650	.652
FA	.337	.339	.340	.340	.350	.348

	G1H0A0013A	G3A100102A	G2A1A0076B	G2A1A0111A	A3A500104B	A3A3A0020A
SIO2	38.03	36.01	35.82	36.55	36.27	36.90
AL2O3	.01	.00	.00	.00	N.A.	.01
CR2O3	.14	N.A.	.00	.00	N.A.	.13
FEO	30.44	30.49	30.77	30.78	30.85	31.02
MNO	.35	.33	.34	.34	.39	.37
MGO	32.14	31.84	31.63	32.33	31.79	31.02
NIO	.01	N.A.	.00	.00	N.A.	.03
CAO	.36	.36	.33	.27	.44	.35
TOTAL	101.48	99.03	98.89	100.27	99.74	99.83
SI IV	1.012	.989	.987	.991	.990	1.005
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	.001
CR VI	.003	-	-	-	-	.003
FE VI	.678	.700	.709	.698	.704	.707
MG VI	1.275	1.303	1.299	1.306	1.293	1.259
MN VI	.008	.008	.008	.008	.009	.008
NI VI	-	-	-	-	-	-
CA VI	.010	.011	.010	.008	.013	.010
	-	-	-	-	-	-
FO	.653	.650	.647	.652	.647	.641
FA	.347	.350	.353	.348	.353	.359

TABLE 12 CONTINUED

	G3A200353A	A3A2L00058A	G3A200041B	G2A1A0121A	G3A1A0031B	G1H0A0020A
SIO2	35.80	37.26	35.51	36.10	35.77	37.68
AL203	N.A.	N.A.	N.A.	.00	.00	.00
CR203	N.A.	.13	N.A.	.00	.00	.14
FEO	31.08	31.25	31.48	31.53	31.55	31.98
MNO	.36	.33	.33	.34	.35	.34
MGO	31.99	32.77	30.73	30.72	30.97	31.26
NIO	N.A.	N.A.	N.A.	.00	N.A.	.03
CAO	.34	.31	.44	.56	.33	.33
TOTAL	99.57	102.05	98.49	99.25	98.97	101.76
SI IV	.981	.992	.987	.994	.989	1.008
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	.001
CR VI	-	.003	-	-	-	.003
FE VI	.712	.696	.732	.726	.729	.715
MG VI	1.307	1.300	1.273	1.261	1.276	1.246
MN VI	.008	.007	.008	.008	.008	.008
NI VI	-	-	-	-	-	-
CA VI	.010	.009	.013	.016	.010	.010
	-	-	-	-	-	-
FO	.647	.651	.635	.635	.636	.635
FA	.353	.349	.365	.365	.364	.365

	A3A100011C	G3A2L00297A	A3A100011B	A3A1L00115A	A3A100011A	G3A200353C
SIO2	36.53	35.38	36.41	36.37	36.47	35.68
AL203	.00	N.A.	.00	.00	.00	N.A.
CR203	.07	N.A.	.07	.11	.07	N.A.
FEO	32.01	32.01	32.03	32.05	32.13	32.35
MNO	.00	.35	.00	.00	.00	.39
MGO	32.60	30.89	32.61	32.17	32.58	30.64
NIO	.02	N.A.	.01	.05	.02	N.A.
CAO	.30	.36	.29	.35	.29	.36
TOTAL	101.53	98.99	101.42	101.10	101.56	99.42
SI IV	.982	.981	.980	.982	.980	.986
AL IV	-	-	-	-	-	-
AL VI	.001	-	-	.002	.001	-
CR VI	.001	-	.001	.002	.001	-
FE VI	.719	.742	.721	.724	.722	.747
MG VI	1.306	1.277	1.308	1.295	1.305	1.262
MN VI	-	.008	-	-	-	.009
NI VI	-	-	-	-	-	-
CA VI	.009	.011	.008	.010	.008	.011
	-	-	-	-	-	-
FO	.645	.632	.645	.641	.644	.628
FA	.355	.368	.355	.359	.356	.372

TABLE 12 CONTINUED

	G3A200353D	A3A5A0015A	A3A1A0100A	A3A200043A	G3A2A0321A	A3A100043A
SIO2	35.52	35.46	36.04	36.65	35.30	36.16
AL2O3	N.A.	N.A.	.00	N.A.	N.A.	.00
CR2O3	N.A.	N.A.	.13	.13	N.A.	.12
FEO	32.47	32.48	32.51	32.54	32.64	32.71
MNO	.38	.39	.00	.35	.37	.00
MGO	30.88	30.74	31.66	31.53	30.36	31.91
NIO	N.A.	N.A.	.06	N.A.	N.A.	.06
CAO	.33	.56	.43	.31	.38	.40
TOTAL	99.58	99.63	100.83	101.51	99.05	101.36
SI IV	.981	.979	.980	.989	.981	.978
AL IV	-	-	-	-	-	-
AL VI	-	-	.002	-	-	.002
CR VI	-	-	.003	.003	-	.003
FE VI	.750	.750	.739	.734	.759	.740
MG VI	1.271	1.265	1.282	1.268	1.258	1.286
MN VI	.009	.009	-	.008	.009	-
NI VI	-	-	-	-	-	-
CA VI	.010	.017	.012	.009	.011	.012
	-	-	-	-	-	-
FO	.629	.628	.634	.633	.624	.635
FA	.371	.372	.366	.367	.376	.365

	A3A400116B	G3A200115A	G3A200115C	G3A2A0111A	A3A1L0115B	G3A2A0053A
SIO2	35.89	35.30	37.24	35.65	35.97	35.15
AL2O3	.04	N.A.	N.A.	N.A.	.00	N.A.
CR2O3	.12	N.A.	N.A.	N.A.	.11	N.A.
FEO	33.03	33.16	33.39	33.46	33.58	33.61
MNO	.38	.37	.37	.34	.00	.33
MGO	30.66	30.11	29.48	27.86	30.98	29.40
NIO	.02	N.A.	N.A.	N.A.	.05	N.A.
CAO	.36	.27	.30	.96	.41	.50
TOTAL	100.50	99.21	100.78	98.27	101.10	98.99
SI IV	.983	.982	1.014	1.003	.980	.983
AL IV	-	-	-	-	-	-
AL VI	.001	-	-	-	.002	-
CR VI	.003	-	-	-	.002	-
FE VI	.757	.771	.760	.788	.765	.786
MG VI	1.252	1.248	1.196	1.169	1.258	1.225
MN VI	.009	.009	.008	.008	-	.008
NI VI	.001	-	-	-	-	-
CA VI	.011	.008	.009	.029	.012	.015
	-	-	-	-	-	-
FO	.623	.618	.611	.597	.622	.609
FA	.377	.382	.389	.403	.378	.391

TABLE 12 CONTINUED

	61H0A0019A	63A1A0095A	A3A3A0159A	63A2001158	A3A3A0007A	A3A2A0019A
SIO2	37.35	35.65	35.61	35.22	36.87	36.40
AL203	.01	.00	.01	N.A.	.00	N.A.
CR203	.13	N.A.	.12	N.A.	.09	.12
FEO	33.71	33.91	33.94	33.98	34.26	34.47
MNO	.40	.36	.38	.36	.39	.40
MGO	30.04	29.39	27.43	28.98	29.23	29.74
NIO	.00	N.A.	.06	N.A.	.01	N.A.
CAO	.35	.28	.40	.34	.31	.34
TOTAL	101.99	99.59	97.95	98.88	101.16	101.47
SI IV	1.006	.990	1.007	.987	1.005	.992
AL IV	-	-	-	-	-	-
AL VI	-	-	.002	-	-	-
CR VI	.003	-	.003	-	.002	.003
FE VI	.759	.787	.802	.796	.781	.785
MG VI	1.206	1.216	1.156	1.211	1.188	1.208
MN VI	.009	.008	.009	.008	.009	.009
NI VI	-	-	-	-	-	-
CA VI	.010	.008	.012	.010	.009	.010
	-	-	-	-	-	-
FO	.614	.607	.590	.603	.603	.606
FA	.386	.393	.410	.397	.397	.394

	A3A1A0009B	63A2A0057B	A3A3A0008A	A3A3A0160A	A3A1A0009A	A3A2L0159A
SIO2	35.27	35.07	36.64	36.91	35.63	36.40
AL203	.00	N.A.	.00	.02	.00	.00
CR203	.11	N.A.	.12	.12	.11	.12
FEO	34.63	34.97	35.03	35.06	35.07	35.09
MNO	.00	.43	.41	.40	.00	.37
MGO	29.55	28.73	28.98	28.23	29.52	29.19
NIO	.05	N.A.	.01	.05	.05	N.A.
CAO	.34	.44	.38	.41	.34	.32
TOTAL	99.95	99.64	101.57	101.20	100.72	101.49
SI IV	.979	.981	.999	1.010	.982	.994
AL IV	-	-	-	-	-	-
AL VI	.002	-	-	.002	.002	-
CR VI	.002	-	.003	.003	.002	.003
FE VI	.804	.818	.799	.802	.808	.802
MG VI	1.222	1.198	1.178	1.151	1.212	1.188
MN VI	-	.010	.010	.009	-	.009
NI VI	-	-	-	-	-	-
CA VI	.010	.013	.011	.012	.010	.009
	-	-	-	-	-	-
FO	.603	.594	.596	.589	.600	.597
FA	.397	.406	.404	.411	.400	.403

TABLE 12 CONTINUED

	G3A2A0402A	G3A200353B	G3A1A0084A	G3A1L0145A	G3A2L0213C	A3A200047A
SI02	35.16	35.07	35.36	34.83	34.86	36.17
AL203	N.A.	N.A.	.00	.00	N.A.	N.A.
CR203	N.A.	N.A.	N.A.	N.A.	N.A.	.12
FEO	35.14	35.26	35.34	35.54	35.71	35.83
MNO	.41	.42	.40	.43	.44	.41
MGO	28.60	28.39	28.00	27.30	27.02	28.85
NIO	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
CAO	.39	.39	.38	.55	1.27	.38
TOTAL	99.70	99.53	99.48	98.65	99.30	101.76
SI IV	.983	.983	.991	.988	.985	.990
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	-
CR VI	-	-	-	-	-	.003
FE VI	.821	.827	.828	.843	.844	.820
MG VI	1.192	1.186	1.169	1.154	1.138	1.176
MN VI	.010	.010	.010	.010	.010	.010
NI VI	-	-	-	-	-	-
CA VI	.012	.012	.011	.017	.038	.011
	-	-	-	-	-	-
FO	.592	.589	.585	.578	.574	.589
FA	.408	.411	.415	.422	.426	.411

	G3A1A0054A	A3A4L0091A	G3A100219A	G2A1L0072A	G3A2L0443A	A3A5A0008A
SI02	35.08	35.52	35.07	35.11	35.23	34.76
AL203	.00	.02	.00	.00	N.A.	N.A.
CR203	N.A.	.06	N.A.	.00	N.A.	N.A.
FEO	35.93	36.04	36.19	36.21	36.30	36.64
MNO	.42	.43	.42	.45	.43	.45
MGO	27.33	27.96	27.76	27.45	27.52	27.60
NIO	N.A.	.01	N.A.	.00	N.A.	N.A.
CAO	.50	.34	.45	.49	.40	.49
TOTAL	99.26	100.38	99.89	99.71	99.88	99.94
SI IV	.989	.989	.984	.987	.988	.978
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	-
CR VI	-	.001	-	-	-	-
FE VI	.847	.839	.849	.851	.851	.862
MG VI	1.149	1.160	1.161	1.150	1.150	1.157
MN VI	.010	.010	.010	.011	.010	.011
NI VI	-	-	-	-	-	-
CA VI	.015	.010	.014	.015	.012	.015
	-	-	-	-	-	-
FO	.575	.580	.578	.575	.575	.573
FA	.425	.420	.422	.425	.425	.427

TABLE 12 CONTINUED

	A3A1L0115C	A3A5A0030A	A3A5L0174A	G3A2L0401A	A3A5A0050A	A3A2L0159B
SIO2	35.22	34.94	33.48	34.53	34.95	35.95
AL2O3	.00	N.A.	N.A.	N.A.	N.A.	N.A.
CR2O3	.08	N.A.	N.A.	N.A.	N.A.	.11
FEO	36.76	37.10	37.14	37.26	37.27	37.51
MNO	.00	.45	.46	.46	.46	.40
MGO	27.89	26.63	25.02	26.48	27.81	27.66
NIO	.05	N.A.	N.A.	N.A.	N.A.	N.A.
CAO	.47	.39	.47	.56	.55	.32
TOTAL	100.47	99.51	96.57	99.29	101.04	101.95
SI IV	.982	.988	.983	.982	.974	.990
AL IV	-	-	-	-	-	-
AL VI	.002	-	-	-	-	-
CR VI	.002	-	-	-	-	.002
FE VI	.857	.878	.912	.886	.869	.863
MG VI	1.159	1.123	1.095	1.122	1.155	1.135
MN VI	-	.011	.011	.011	.011	.009
NI VI	-	-	-	-	-	-
CA VI	.014	.012	.015	.017	.016	.009
	-	-	-	-	-	-
FO	.575	.561	.546	.559	.571	.568
FA	.425	.439	.454	.441	.429	.432

	G3A1A0031A	A3A4A0006A	G3A1A0086A	G3A1L0087B	A3A2B0043B	A3A3A0158A
SIO2	34.21	35.00	34.45	34.09	35.80	36.54
AL2O3	.00	.00	.00	.00	N.A.	.05
CR2O3	N.A.	N.A.	N.A.	N.A.	.11	.08
FEO	37.78	38.24	38.54	39.04	39.06	39.83
MNO	.51	.41	.45	.47	.42	.48
MGO	25.44	26.61	25.50	24.81	26.16	34.49
NIO	N.A.	N.A.	N.A.	N.A.	N.A.	.05
CAO	.53	.30	.44	.45	.39	.49
TOTAL	98.47	100.56	99.38	98.86	101.94	112.01
SI IV	.985	.984	.984	.983	.993	.920
AL IV	-	-	-	-	-	-
AL VI	-	-	-	-	-	.001
CR VI	-	-	-	-	.002	.002
FE VI	.910	.899	.921	.942	.906	.838
MG VI	1.092	1.115	1.086	1.067	1.082	1.294
MN VI	.012	.010	.011	.012	.010	.010
NI VI	-	-	-	-	-	.001
CA VI	.016	.009	.014	.014	.012	.013
	-	-	-	-	-	-
FO	.545	.554	.541	.531	.544	.607
FA	.455	.446	.459	.469	.456	.393

TABLE 12 CONTINUED

	A3A2L0159C	G3A1A0159A	G1H0L0022A	G3A2L0207A	A3A5L0052A	G3A2A0048A
SIO2	35.23	34.23	35.42	33.43	33.56	33.57
AL203	N.A.	.00	.01	N.A.	N.A.	N.A.
CR203	.07	N.A.	.09	N.A.	N.A.	N.A.
FEO	40.32	40.61	42.56	43.23	43.58	44.42
MNO	.41	.47	.47	.44	.52	.48
MGO	24.78	24.19	22.32	21.65	21.23	20.10
NIO	N.A.	N.A.	.05	N.A.	N.A.	N.A.
CAO	.35	.45	.50	.45	.46	.60
TOTAL	101.16	99.95	101.42	99.20	99.35	99.17
SI IV	.993	.983	1.006	.982	.986	.992
AL IV	-	-	-	-	-	-
AL VI	-	-	.002	-	-	-
CR VI	.002	-	.002	-	-	-
FE VI	.950	.975	1.011	1.062	1.071	1.098
MG VI	1.041	1.035	.945	.948	.930	.886
MN VI	.010	.011	.011	.011	.013	.012
NI VI	-	-	-	-	-	-
CA VI	.011	.014	.015	.014	.015	.019
	-	-	-	-	-	-
FO	.523	.515	.483	.472	.465	.446
FA	.477	.485	.517	.528	.535	.554

	G3A2A0048C	G3A2A0347A	A3A1A0062A	A3A1A0059A	G1H0A0010A	G3A200209D
SIO2	33.30	32.77	29.83	32.09	32.24	30.57
AL203	N.A.	N.A.	.00	.00	.08	N.A.
CR203	N.A.	N.A.	.06	.06	.06	N.A.
FEO	45.25	47.00	52.79	54.74	58.38	59.14
MNO	.47	.54	.00	.00	.70	.74
MGO	19.70	18.75	12.86	13.49	8.83	8.34
NIO	N.A.	N.A.	.14	.07	.11	N.A.
CAO	.44	.55	.62	.62	.78	.79
TOTAL	99.16	99.61	96.30	101.07	101.18	99.58
SI IV	.989	.979	.963	.980	1.006	.982
AL IV	-	-	-	-	-	-
AL VI	-	-	.005	.003	.004	-
CR VI	-	-	.001	.001	.001	-
FE VI	1.124	1.175	1.425	1.399	1.523	1.589
MG VI	.872	.835	.619	.614	.411	.399
MN VI	.012	.014	-	-	.019	.020
NI VI	-	-	-	-	.002	-
CA VI	.014	.018	.021	.020	.026	.027
	-	-	-	-	-	-
FO	.437	.416	.303	.305	.212	.201
FA	.563	.584	.697	.695	.788	.799

TABLE 12 CONTINUED

	G3A200209B	G3A200209C	G3A200209A	G3A200209E	A3A3A0140A
SIO2	30.37	30.69	30.01	29.59	31.07
AL2O3	N.A.	N.A.	N.A.	N.A.	.28
CR2O3	N.A.	N.A.	N.A.	N.A.	.09
FEO	59.54	59.90	60.94	61.81	62.36
MNO	.73	.73	.72	.71	.76
MGO	8.45	8.50	7.25	5.75	4.33
NIO	N.A.	N.A.	N.A.	N.A.	.56
CAO	.67	.72	.67	.68	.70
TOTAL	99.76	100.54	99.59	98.54	100.15
SI IV	.976	.978	.975	.980	1.007
AL IV	-	-	-	-	-
AL VI	-	-	-	-	.021
CR VI	-	-	-	-	.002
FE VI	1.600	1.596	1.656	1.712	1.690
MG VI	.405	.404	.351	.284	.209
MN VI	.020	.020	.020	.020	.021
NI VI	-	-	-	-	.007
CA VI	.023	.025	.023	.024	.024
	-	-	-	-	-
FO	.202	.202	.175	.142	.110
FA	.798	.798	.825	.858	.890

TABLE 13. OPAQUE MINERAL ANALYSES - I. SPINELS

	A3A2AX127B	A3A2AX127A	G3A2LX028B	G1H0AX020B	G1G0LX005A	A3A2AX113A
TIO2	.02	.03	8.48	9.31	11.21	17.80
AL203	65.24	64.56	20.74	20.81	15.67	7.23
CR203	5.88	5.76	29.87	29.90	29.73	23.88
FEO	7.41	7.39	37.44	34.07	42.78	47.30
MNO	.00	.05	.34	.29	.35	.45
MGO	21.54	21.22	2.99	5.00	.77	1.09
TOTAL	100.09	99.02	99.86	99.39	100.51	97.75
CR	.347	.344	2.344	2.317	2.410	2.070
AL	5.742	5.746	2.426	2.404	1.894	.934
TI	.001	.002	.633	.686	.864	1.468
FE	.463	.467	3.108	2.792	3.668	4.337
MG	2.398	2.388	.442	.730	.118	.178
MN	-	.003	.029	.024	.030	.042

	G3A2LX443A	G1G0LX005C	A3A4LX075A	G3A20X353A	G3A2AX412A	G1G0LX005B
TIO2	19.58	20.24	21.14	21.91	23.15	23.79
AL203	7.75	5.88	5.86	6.98	6.10	4.09
CR203	23.37	20.61	19.60	20.14	16.47	15.31
FEO	43.84	49.75	48.93	46.87	50.36	52.25
MNO	.39	.38	.37	.38	.40	.41
MGO	3.44	.54	.73	2.72	1.35	.58
TOTAL	98.37	97.40	96.63	99.01	97.82	96.44
CR	1.962	1.810	1.726	1.695	1.426	1.369
AL	.970	.770	.769	.876	.787	.545
TI	1.564	1.691	1.771	1.754	1.906	2.024
FE	3.894	4.622	4.558	4.172	4.611	4.943
MG	.545	.089	.121	.432	.220	.098
MN	.035	.036	.035	.034	.037	.039

TABLE 13 CONTINUED

	A3A5AX073A	G1G0LX005D	G2A1LX044B	G1G0LX001H	G1G0LX006E	G1G0LX001G
TIO2	24.13	24.34	24.88	25.33	25.54	25.70
AL2O3	5.55	3.88	4.15	5.14	3.57	3.87
CR2O3	17.04	15.51	14.89	17.36	13.37	16.73
FEO	50.86	53.09	54.04	52.47	53.95	52.69
MNO	.42	.40	.39	.43	.39	.46
MGO	1.07	.51	.39	1.22	.82	1.27
TOTAL	99.07	97.73	98.74	101.94	97.64	100.72
CR	1.459	1.371	1.302	1.447	1.183	1.421
AL	.708	.511	.541	.639	.471	.490
TI	1.965	2.046	2.069	2.008	2.149	2.077
FE	4.607	4.963	4.997	4.626	5.048	4.735
MG	.173	.085	.064	.192	.137	.203
MN	.038	.038	.036	.038	.037	.042

	G1B0LX003E	G3A2LX020B	G3A2LX194A	A3A4AX124A	A3A4LX075B	G3A2LX401A
TIO2	26.45	26.50	26.71	26.86	27.35	27.41
AL2O3	2.98	3.74	5.25	3.57	3.09	3.62
CR2O3	13.67	11.09	12.63	11.92	12.10	11.86
FEO	54.14	54.09	50.51	53.87	53.67	53.15
MNO	.37	.35	.40	.40	.41	.46
MGO	.62	.41	3.01	.93	.66	1.28
TOTAL	98.23	96.18	98.50	97.55	97.29	97.78
CR	1.203	.995	1.075	1.051	1.071	1.038
AL	.391	.500	.666	.469	.408	.472
TI	2.215	2.261	2.162	2.252	2.303	2.281
FE	5.041	5.132	4.546	5.023	5.026	4.919
MG	.103	.069	.483	.155	.110	.211
MN	.035	.034	.036	.038	.039	.043

TABLE 13 CONTINUED

	A3A4AX134A	G1H0AX003B	G1H0LX022A	G2A1LX037B	G1B0LX005B	A3A3AX067A
TIO2	27.78	27.79	27.85	28.11	28.51	28.85
AL203	2.70	2.67	2.95	3.23	3.35	2.27
CR203	12.03	10.22	12.85	7.60	12.09	8.96
FE0	55.75	56.99	55.61	56.03	53.92	56.55
MN0	.38	.37	.39	.67	.34	.36
MG0	.46	.06	.62	.72	1.20	.32
TOTAL	99.10	98.10	100.28	96.36	99.42	97.31
CR	1.052	.909	1.107	.683	1.040	.801
AL	.352	.354	.379	.433	.430	.303
TI	2.311	2.350	2.283	2.404	2.332	2.454
FE	5.159	5.360	5.069	5.330	4.905	5.349
MG	.076	.010	.101	.122	.195	.054
MN	.036	.035	.036	.065	.031	.035

	A3A1AX113A	G1B0LX004D	G1B0LX006B	A3A1LX050A	G3A2PX092A	
TIO2	29.31	31.76	31.79	32.88	33.25	.00
AL203	2.44	2.18	2.16	2.63	2.18	.00
CR203	9.97	8.70	5.03	.05	.07	.00
FE0	55.95	54.81	59.62	62.37	61.65	.00
MN0	.54	.38	.35	.46	.38	.00
MG0	.89	1.33	.08	.03	.28	.00
TOTAL	99.10	99.15	99.03	98.42	97.81	.00
CR	.870	.750	.442	.004	.006	-
AL	.317	.280	.283	.348	.290	-
TI	2.431	2.604	2.659	2.779	2.824	-
FE	5.161	4.997	5.546	5.863	5.823	-
MG	.146	.216	.013	.005	.047	-
MN	.050	.035	.033	.044	.036	-

TABLE 14. OPAQUE MINERAL ANALYSES - II. ILMENITES

	G3A3AX003A	G3A3AX018A	G3A3AX063A	G1H0LX022B	A3A2LX091A	A3A2AX069A
TIO2	51.27	51.36	51.64	51.96	52.12	52.13
AL2O3	.93	.96	.88	1.92	.40	.14
CR2O3	.64	.65	.65	.08	.54	.10
FEO	45.68	43.86	44.27	42.77	41.95	45.26
MNO	.67	.61	.64	.10	.44	.42
MGO	.46	.56	.42	.66	1.85	.15
TOTAL	99.65	97.99	98.50	97.50	97.29	98.20
CR	.051	.052	.052	.006	.043	.008
AL	.111	.115	.105	.229	.048	.017
TI	3.889	3.936	3.943	3.958	3.988	4.014
FE	3.853	3.738	3.759	3.623	3.569	3.876
MG	.069	.085	.064	.100	.280	.023
MN	.057	.053	.055	.009	.038	.036

	G3A3AX059A	G1G0LX002E	G3A1LX007A	G3A2LX011A	A3A3LX039A	G3A3AX068A
TIO2	52.21	52.34	52.35	52.36	52.57	52.58
AL2O3	1.30	.12	.11	.78	.00	.85
CR2O3	.61	.36	.26	.00	.00	.46
FEO	44.70	45.83	43.94	45.59	44.42	45.51
MNO	.62	.45	.44	.34	.11	.65
MGO	.34	.27	.33	.30	.00	.22
TOTAL	99.78	99.37	97.42	99.37	97.09	100.27
CR	.048	.029	.021	-	-	.036
AL	.153	.014	.013	.093	-	.100
TI	3.928	3.987	4.043	3.971	4.079	3.952
FE	3.740	3.882	3.774	3.845	3.833	3.804
MG	.051	.041	.050	.045	-	.033
MN	.053	.039	.038	.029	.010	.055

TABLE 14 CONTINUED

	A3A3LX138A	A3A5LX174A	G3A1LX016A	G2A1LX044A	A3A3LX109A	G3A3LX009A
TIO2	52.60	52.62	52.63	52.64	52.65	52.65
AL203	.00	.13	.12	.54	.00	.82
CR203	.24	.27	.37	.32	.33	.32
FEO	43.59	44.49	44.28	45.15	43.46	45.60
MNO	.17	.42	.39	.47	.16	.60
MGO	.27	.30	.29	.42	.71	.02
TOTAL	96.87	98.22	98.07	99.55	97.32	100.01
CR	.020	.022	.030	.025	.027	.025
AL	-	.016	.014	.064	-	.097
TI	4.078	4.034	4.039	3.982	4.057	3.970
FE	3.758	3.793	3.779	3.798	3.724	3.823
MG	.041	.046	.044	.063	.108	.003
MN	.015	.036	.034	.040	.014	.051

	A3A1AX106A	A3A2LX107A	A3A2LX092A	G1G0LX003D	G3A1LX044A	G3A3AX031A
TIO2	52.69	52.72	52.74	52.74	52.79	52.79
AL203	.16	.13	.13	2.98	.16	.83
CR203	.44	.26	.20	.15	.34	.69
FEO	44.96	42.92	45.57	46.20	44.85	44.57
MNO	.46	.44	.46	.34	.42	.66
MGO	.39	1.57	.09	.14	.18	.56
TOTAL	99.10	98.04	99.20	102.55	98.74	100.09
CR	.035	.021	.016	.012	.027	.054
AL	.019	.015	.015	.340	.019	.098
TI	4.008	4.017	4.019	3.841	4.030	3.958
FE	3.804	3.637	3.862	3.742	3.807	3.717
MG	.059	.237	.014	.020	.027	.083
MN	.039	.038	.039	.028	.036	.056

TABLE 14 CONTINUED

	A3A1AX025A	G3A2LX030A	G1G0LX006B	A3A3AX156A	G1H0AX020A	G3A2LX020A
TIO2	52.83	52.84	52.85	52.89	52.92	52.92
AL2O3	.06	.38	.06	.00	.00	.42
CR2O3	.43	.21	.28	.26	.20	.54
FEO	43.33	44.85	45.55	43.40	44.55	44.08
MNO	.49	.44	.39	.16	.15	.43
MGO	1.11	.53	.30	.58	.10	.86
TOTAL	98.25	99.25	99.44	97.29	97.92	99.25
CR	.035	.017	.022	.021	.016	.043
AL	.007	.045	.007	-	-	.050
TI	4.027	4.005	4.015	4.074	4.069	3.997
FE	3.673	3.780	3.848	3.718	3.809	3.702
MG	.168	.080	.045	.089	.015	.129
MN	.042	.038	.033	.014	.013	.037

	G3A2AX043A	A3A3LX140A	G1G0LX007A	G2A1LX101A	A3A3AX106A	A3A2LX048B
TIO2	52.93	52.96	52.96	52.96	52.98	53.01
AL2O3	.48	.00	.06	.49	.00	.13
CR2O3	.39	.04	.41	.36	.00	.41
FEO	43.95	44.86	45.43	45.33	44.50	43.89
MNO	.40	.15	.41	.42	.18	.44
MGO	.86	.02	.27	.26	.15	1.13
TOTAL	99.01	98.03	99.55	99.83	97.81	99.00
CR	.031	.003	.033	.029	-	.033
AL	.057	-	.007	.058	-	.015
TI	4.004	4.072	4.016	3.996	4.077	4.013
FE	3.697	3.836	3.832	3.804	3.808	3.695
MG	.129	.003	.041	.039	.023	.169
MN	.034	.013	.035	.036	.016	.038

TABLE 14 CONTINUED

	G1G0LX003C	G2A1LX037A	G1H0AX003A	A3A5LX132A	A3A5LX215A	G3A2LX154A
TIO2	53.02	53.04	53.08	53.09	53.12	53.12
AL2O3	.22	.56	.00	.08	.15	.46
CR2O3	.35	.13	.06	.31	.43	.40
FEO	45.38	45.90	43.64	44.87	44.08	44.63
MNO	.43	.43	.19	.39	.43	.41
MGO	.72	.34	.55	.10	.45	.54
TOTAL	100.12	100.41	97.52	98.83	98.65	99.56
CR	.028	.010	.005	.025	.034	.032
AL	.026	.066	-	.010	.018	.054
TI	3.989	3.983	4.081	4.048	4.043	4.006
FE	3.797	3.833	3.731	3.804	3.731	3.743
MG	.107	.051	.084	.015	.068	.081
MN	.036	.036	.016	.033	.037	.035

	A3A2LX094A	A3A4LX104A	A3A1AX068A	G1G0LX002C	A3A1LX026A	A3A3XX094A
TIO2	53.13	53.13	53.15	53.15	53.16	53.17
AL2O3	.13	.11	.12	.12	.97	.00
CR2O3	.11	.13	.29	.47	.56	.25
FEO	45.58	45.56	45.12	43.31	45.0[illegible]	44.04
MNO	.41	.38	.52	.42	.47	.13
MGO	.03	.08	.43	1.98	.55	.16
TOTAL	99.40	99.39	99.63	99.45	100.71	97.75
CR	.009	.010	.023	.037	.044	.020
AL	.015	.013	.014	.014	.113	-
TI	4.036	4.036	4.020	3.989	3.959	4.086
FE	3.851	3.849	3.795	3.615	3.727	3.763
MG	.004	.012	.065	.295	.081	.024
MN	.035	.032	.044	.035	.039	.011

TABLE 14 CONTINUED

	G2A1LX142A	G2A1LX085A	G3A1AX073A	G3A3LX073A	A3A4LX010A	G3A2LX028A
TIO2	53.18	53.20	53.20	53.20	53.21	53.21
AL2O3	.52	.58	.14	.86	.11	.57
CR2O3	.17	.31	.27	.50	.45	.16
FEO	45.40	45.64	45.26	45.19	45.43	45.01
MNO	.40	.43	.40	.62	.41	.42
MGO	.23	.24	.24	.32	.26	.53
TOTAL	99.91	100.41	99.52	100.70	99.87	99.90
CR	.014	.024	.022	.039	.036	.013
AL	.061	.068	.017	.101	.013	.067
TI	4.007	3.991	4.030	3.970	4.019	4.001
FE	3.805	3.807	3.813	3.750	3.816	3.764
MG	.034	.036	.036	.047	.039	.079
MN	.034	.036	.034	.052	.035	.036

	G1G0LX003B	G3A1LX145A	G1B0LX003C	A3A1LX045A	G1G0LX002B	G1G0LX007C
TIO2	53.22	53.22	53.23	53.25	53.26	53.27
AL2O3	.21	.17	.01	.21	.06	.07
CR2O3	.16	.39	.51	.53	.26	.28
FEO	45.80	44.65	44.37	44.87	46.63	45.79
MNO	.42	.43	.43	.53	.42	.43
MGO	.42	.31	.76	.53	.11	.11
TOTAL	100.24	99.18	99.31	99.91	100.74	99.95
CR	.013	.031	.041	.042	.021	.022
AL	.025	.020	.001	.025	.007	.008
TI	4.006	4.037	4.027	4.009	4.004	4.026
FE	3.834	3.766	3.733	3.757	3.898	3.849
MG	.063	.047	.114	.079	.016	.016
MN	.036	.037	.037	.045	.036	.037

TABLE 14 CONTINUED

	G2A1LX072A	G3A1LX128A	A3A1LX028A	A3A5LX160A	G3A2LX013A	G1G0LX006D
TIO2	53.27	53.27	53.30	53.32	53.33	53.34
AL2O3	.56	.29	.14	.44	.42	.19
CR2O3	.36	.52	.27	.47	.37	.44
FEO	45.73	43.73	45.61	43.13	45.01	45.03
MNO	.47	.39	.54	.41	.39	.39
MGO	.29	.74	.16	1.07	.58	.50
TOTAL	100.68	98.95	100.02	98.84	100.10	99.89
CR	.028	.041	.021	.037	.029	.035
AL	.066	.034	.017	.052	.049	.022
TI	3.986	4.031	4.023	4.025	4.003	4.017
FE	3.805	3.680	3.828	3.621	3.757	3.772
MG	.043	.111	.024	.160	.086	.075
MN	.040	.033	.046	.035	.033	.033

	G3A2LX029A	G3A2AX064A	A3A2LX129A	A3A2LX035A	G1G0LX005F	G1G0LX007B
TIO2	53.35	53.36	53.37	53.38	53.39	53.40
AL2O3	.47	.42	.13	.15	.12	.06
CR2O3	.40	.26	.43	.31	.33	.26
FEO	44.48	45.46	45.34	44.32	45.48	46.04
MNO	.43	.41	.42	.43	.41	.39
MGO	.65	.36	.31	.73	.24	.11
TOTAL	99.78	100.27	100.00	99.32	99.97	100.26
CR	.032	.020	.034	.025	.026	.021
AL	.055	.049	.015	.018	.014	.007
TI	4.009	4.006	4.022	4.033	4.027	4.025
FE	3.718	3.795	3.800	3.724	3.815	3.859
MG	.097	.054	.046	.109	.036	.016
MN	.036	.035	.036	.037	.035	.033

TABLE 14 CONTINUED

	G3A3AX010A	A3A2AX122A	G1G0LX002D	G3A2LX072A	A3A3AX153A	G1G0LX002F
TIO2	53.41	53.42	53.42	53.44	53.45	53.46
AL2O3	.81	.34	.08	.44	.00	.17
CR2O3	.74	.60	.79	.18	.39	.42
FEO	44.82	44.96	45.04	45.35	43.41	45.70
MNO	.68	.72	.42	.40	.19	.43
MGO	.46	.38	1.01	.35	.62	.46
TOTAL	100.93	100.42	100.76	100.17	98.06	100.65
CR	.058	.047	.062	.014	.031	.033
AL	.094	.040	.009	.052	-	.020
TI	3.971	4.003	3.986	4.014	4.079	4.004
FE	3.706	3.746	3.737	3.788	3.684	3.807
MG	.068	.056	.149	.052	.094	.068
MN	.057	.061	.035	.034	.016	.036

	G1G0LX006A	G1G0LX002H	G3A2LX177A	G1B0LX003A	G2A1LX115A	G3A2LX184A
TIO2	53.46	53.48	53.48	53.49	53.51	53.52
AL2O3	.06	.36	.42	.01	.57	.40
CR2O3	.47	.41	.45	.40	.27	.42
FEO	45.08	45.32	44.74	44.72	45.77	43.93
MNO	.39	.43	.39	.40	.41	.43
MGO	.54	.81	.78	.72	.15	1.09
TOTAL	100.01	100.81	100.25	99.74	100.68	99.78
CR	.037	.032	.035	.032	.021	.033
AL	.007	.042	.049	.001	.067	.047
TI	4.023	3.988	4.001	4.031	4.002	4.011
FE	3.773	3.758	3.722	3.748	3.807	3.661
MG	.081	.120	.116	.107	.022	.162
MN	.033	.036	.033	.034	.035	.036

TABLE 14 CONTINUED

	G3A2LX142A	A3A1LX093A	G1G0LX002G	A3A3LX144A	G3A2AX140A	A3A3LX018A
TIO2	53.53	53.54	53.54	53.57	53.59	53.61
AL203	.49	.12	.92	.00	.59	.00
CR203	.37	.41	.43	.02	.09	.22
FEO	45.13	45.83	45.76	44.87	45.16	44.32
MNO	.41	.41	.41	.16	.09	.12
MGO	.60	.17	.55	.00	.60	.14
TOTAL	100.53	100.48	101.61	98.62	100.12	98.41
CR	.029	.032	.033	.002	.007	.018
AL	.057	.014	.107	-	.069	-
TI	3.999	4.021	3.957	4.088	4.014	4.091
FE	3.749	3.828	3.761	3.808	3.761	3.761
MG	.089	.025	.081	-	.089	.021
MN	.035	.035	.034	.014	.008	.010

	G1G0LX001F	G1G0LX001I	G1G0LX003A	G1G0LX005E	G1G0LX001J	A3A1LX010A
TIO2	53.61	53.61	53.61	53.61	53.62	53.65
AL203	.05	.08	.06	.06	1.13	.14
CR203	.13	.31	.37	.43	.40	.47
FEO	46.79	46.47	45.22	45.18	46.26	44.58
MNO	.38	.40	.44	.43	.40	.48
MGO	.02	.26	.96	.26	.26	.64
TOTAL	100.98	101.13	100.66	99.98	102.06	99.96
CR	.010	.024	.029	.034	.031	.037
AL	.006	.009	.007	.007	.130	.016
TI	4.020	4.007	4.005	4.039	3.949	4.030
FE	3.902	3.863	3.757	3.785	3.789	3.724
MG	.003	.038	.142	.039	.038	.095
MN	.032	.034	.037	.036	.033	.041

TABLE 14 CONTINUED

	A3A2LX037A	A3A2LX159A	G1H0LX016B	A3A2AX140A	A3A4LX036A	G3A2LX070A
TIO2	53.66	53.66	53.67	53.70	53.72	53.74
AL203	.13	.12	.00	.14	.07	.43
CR203	.25	.60	.16	.36	.26	.31
FE0	45.17	44.35	44.92	45.26	45.63	44.53
MN0	.45	.40	.17	.41	.42	.45
MG0	.53	.82	.05	.26	.10	.86
TOTAL	100.19	99.96	98.97	100.14	100.19	100.31
CR	.020	.047	.013	.029	.021	.024
AL	.015	.014	-	.016	.008	.050
TI	4.029	4.026	4.080	4.037	4.043	4.013
FE	3.772	3.700	3.798	3.784	3.819	3.698
MG	.079	.122	.008	.039	.015	.127
MN	.038	.034	.015	.035	.036	.038

	A3A2AX068A	G1G0LX006C	G3A1LX136A	G1G0LX002A	A3A1LX045B	G1B0LX004E
TIO2	53.77	53.77	53.77	53.78	53.80	53.80
AL203	.04	.06	.10	.08	.11	.05
CR203	.35	.42	.49	.70	.54	.72
FE0	43.55	45.05	44.80	44.98	44.65	43.44
MN0	.37	.39	.42	.44	.49	.40
MG0	1.46	.54	.40	1.10	.71	1.20
TOTAL	99.54	100.22	99.98	101.08	100.30	99.61
CR	.028	.033	.039	.055	.042	.057
AL	.005	.007	.012	.009	.013	.006
TI	4.035	4.034	4.042	3.995	4.027	4.035
FE	3.634	3.759	3.745	3.716	3.717	3.623
MG	.217	.080	.060	.162	.105	.178
MN	.031	.033	.036	.037	.041	.034

TABLE 14 CONTINUED

	A3A2AX162A	A3A2LX009A	A3A2AX066A	A3A4AX061A	A3A3LX111A	G3A2LX473A
TIO2	53.81	53.82	53.82	53.82	53.85	53.86
AL2O3	.14	.13	.11	.11	.00	.39
CR2O3	.66	.40	.26	.38	.24	.52
FEO	45.16	45.40	45.62	45.56	44.60	44.37
MNO	.43	.44	.36	.37	.15	.42
MGO	.37	.83	.14	.14	.14	.82
TOTAL	100.57	101.02	100.32	100.38	98.98	100.38
CR	.052	.031	.020	.030	.019	.041
AL	.016	.015	.013	.013	-	.046
TI	4.025	4.006	4.044	4.040	4.087	4.017
FE	3.757	3.758	3.812	3.803	3.764	3.680
MG	.055	.123	.021	.021	.021	.121
MN	.036	.037	.031	.031	.013	.035

	G1B0LX006C	A3A1AX112A	G3A2AX042A	G3A2PX153B	G1B0LX003B	G2A1LX078A
TIO2	53.87	53.89	53.90	53.91	53.92	53.92
AL2O3	.02	.13	.42	.42	.00	.54
CR2O3	.32	.56	.67	.41	.36	.20
FEO	45.88	45.05	42.36	44.47	44.98	45.80
MNO	.37	.50	.39	.42	.40	.39
MGO	.13	.66	1.93	.95	.58	.07
TOTAL	100.59	100.80	99.67	100.58	100.24	100.93
CR	.025	.044	.052	.032	.028	.016
AL	.002	.015	.049	.049	-	.063
TI	4.040	4.018	4.012	4.012	4.043	4.021
FE	3.827	3.736	3.506	3.680	3.751	3.798
MG	.019	.098	.285	.140	.086	.010
MN	.031	.042	.033	.035	.034	.033

TABLE 14 CONTINUED

	G3A2LX010A	G1H0LX028A	A3A4LX058A	G1G0LX001C	A3A5AX058B	G1G0LX001B
TIO2	53.92	53.94	53.96	53.96	53.97	53.97
AL203	.45	.00	.14	.05	.12	.07
CR203	.66	.00	.55	.38	.53	.48
FE0	43.89	44.96	43.90	46.30	44.09	46.47
MN0	.40	.20	.40	.40	.38	.39
MG0	1.09	.21	.94	.22	.58	.26
TOTAL	100.41	99.31	99.88	101.30	99.66	101.63
CR	.052	-	.043	.030	.042	.038
AL	.052	-	.016	.006	.014	.008
TI	4.010	4.083	4.041	4.021	4.056	4.010
FE	3.630	3.785	3.656	3.837	3.685	3.840
MG	.161	.032	.139	.032	.086	.038
MN	.033	.017	.034	.034	.032	.033

	G2A1LX060A	G1B0LX004A	G3A2PX153A	G3A3LX079A	A3A1LX060A	G1B0LX002A
TIO2	53.97	53.98	53.98	54.00	54.04	54.06
AL203	.53	.01	.43	.82	.12	.03
CR203	.38	.55	.45	.65	.34	.50
FE0	45.59	44.70	44.53	45.45	44.80	44.85
MN0	.40	.38	.40	.63	.53	.42
MG0	.30	.67	.90	.27	.72	.75
TOTAL	101.17	100.29	100.69	101.82	100.55	100.61
CR	.030	.043	.035	.050	.027	.039
AL	.062	.001	.050	.095	.014	.004
TI	4.009	4.040	4.012	3.982	4.034	4.034
FE	3.766	3.721	3.681	3.727	3.719	3.722
MG	.044	.099	.133	.039	.107	.111
MN	.033	.032	.033	.052	.045	.035

TABLE 14 CONTINUED

	A3A4AX143A	G1G0LX001A	G3A1LX109A	G3A3AX078A	A3A2LX100A	G1B0LX001A
TIO2	54.07	54.07	54.07	54.08	54.09	54.10
AL2O3	.12	.06	.15	.96	.08	.01
CR2O3	.51	.47	.60	.64	.35	.43
FEO	44.36	46.47	44.00	44.26	45.02	44.49
MNO	.40	.41	.40	.64	.42	.41
MGO	.74	.27	.90	1.06	.58	.71
TOTAL	100.19	101.75	100.12	101.63	100.55	100.15
CR	.040	.037	.047	.049	.028	.034
AL	.014	.007	.018	.110	.009	.001
TI	4.043	4.013	4.040	3.970	4.041	4.051
FE	3.689	3.835	3.656	3.613	3.741	3.705
MG	.110	.040	.133	.154	.086	.105
MN	.034	.034	.034	.053	.035	.035

	G3A2AX203A	G3A3LX075A	G1G0LX001E	G3A3LX079B	A3A2AX008A	A3A3LX077A
TIO2	54.16	54.17	54.26	54.32	54.36	54.37
AL2O3	.39	.84	.05	.85	.12	.00
CR2O3	.22	.65	.19	.74	.50	.31
FEO	45.80	45.09	46.74	45.13	44.35	41.77
MNO	.41	.65	.38	.65	.42	.13
MGO	.30	.41	.04	.74	1.04	1.86
TOTAL	101.29	101.81	101.66	102.43	100.79	98.44
CR	.017	.050	.015	.057	.039	.025
AL	.045	.097	.006	.097	.014	-
TI	4.022	3.987	4.034	3.970	4.035	4.090
FE	3.783	3.691	3.864	3.668	3.661	3.495
MG	.044	.060	.006	.107	.153	.277
MN	.034	.054	.032	.053	.035	.011

TABLE 14 CONTINUED

	61G0LX001D	61B0LX005A	A3A2LX048A	G3A2AX048A	A3A1AX068B	G3A2LX323A
TIO2	54.37	54.39	54.44	54.44	54.45	54.47
AL203	.05	.00	.17	.41	.13	.33
CR203	.23	.33	.42	.81	.34	.55
FE0	46.70	45.46	44.20	40.60	45.37	43.13
MN0	.40	.39	.41	.41	.50	.41
MG0	.05	.27	1.21	3.09	.54	1.86
TOTAL	101.80	100.85	100.84	99.76	101.33	100.75
CR	.018	.026	.033	.063	.027	.043
AL	.006	-	.020	.047	.015	.038
TI	4.035	4.058	4.034	4.011	4.038	4.018
FE	3.854	3.772	3.642	3.327	3.741	3.538
MG	.007	.040	.178	.451	.079	.272
MN	.033	.033	.034	.034	.042	.034

	61G0LX004B	61B0LX004B	61H0AX008A	61G0LX004A	61G0LX004C	61B0LX007A
TIO2	54.49	54.55	54.56	54.58	54.62	54.81
AL203	.04	.02	.00	.04	.05	.01
CR203	.38	.48	.12	.34	.38	.66
FE0	46.66	45.66	40.33	46.83	46.32	44.36
MN0	.42	.42	.15	.38	.39	.39
MG0	.12	.30	2.86	.09	.14	.99
TOTAL	102.11	101.43	98.02	102.26	101.90	101.22
CR	.030	.037	.010	.026	.030	.051
AL	.005	.002	-	.005	.006	.001
TI	4.030	4.047	4.092	4.031	4.041	4.050
FE	3.837	3.767	3.364	3.846	3.811	3.645
MG	.018	.044	.425	.013	.020	.145
MN	.035	.035	.013	.032	.032	.032

TABLE 14 CONTINUED

	G1H0AX007A	G1B0LX004C	G3A2AX069A
TIO2	54.86	55.03	55.11
AL203	.00	.00	.31
CR203	.37	.75	.71
FEO	42.60	42.47	39.34
MNO	.15	.38	.34
MGO	1.45	2.15	3.57
TOTAL	99.43	100.78	99.39
CR	.029	.058	.055
AL	-	-	.036
TI	4.096	4.047	4.050
FE	3.537	3.474	3.215
MG	.215	.313	.520
MN	.013	.032	.028