## APPENDIX 2A

### EMP analyses of plagioclase from the biotite-muscovite granites of the Strzelin Massif

| | Gromnik | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profile 1 | | | | | | | | | | | Profile 2 | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 1 | 2 | 3 | 4 |
| $SiO_2$ | 65.63 | 61.61 | 64.45 | 63.91 | 61.25 | 63.62 | 63.3 | 64.21 | 58.71 | 63.17 | 64.51 | 65.55 | 64.05 | 63.00 | 62.70 |
| $Al_2O_3$ | 21.89 | 24.92 | 22.85 | 23.28 | 24.51 | 23.12 | 23.46 | 22.79 | 26.42 | 23.23 | 22.50 | 21.87 | 22.51 | 23.54 | 23.95 |
| CaO | 2.57 | 5.85 | 3.65 | 3.86 | 5.69 | 4.12 | 4.11 | 3.66 | 7.76 | 4.69 | 3.52 | 2.53 | 3.57 | 4.72 | 4.97 |
| FeO | 0.05 | 0.03 | 0.02 | 0.01 | 0.10 | 0.08 | 0.04 | 0 | 0.01 | 0 | 0.01 | 0 | 0.04 | 0 | 0 |
| BaO | 0.05 | 0.04 | 0.02 | 0 | 0 | 0.07 | 0.04 | 0 | 0 | 0 | 0.01 | 0.04 | 0 | 0.04 | 0.01 |
| $Na_2O$ | 10.31 | 8.37 | 9.65 | 9.31 | 8.44 | 9.36 | 9.50 | 9.41 | 7.25 | 8.95 | 9.57 | 10.23 | 9.45 | 9.21 | 8.81 |
| $K_2O$ | 0.18 | 0.17 | 0.20 | 0.32 | 0.19 | 0.26 | 0.04 | 0.30 | 0.15 | 0.29 | 0.11 | 0.20 | 0.19 | 0.21 | 0.22 |
| Sum | 100.68 | 100.99 | 100.84 | 100.69 | 100.18 | 100.63 | 100.49 | 100.37 | 100.3 | 100.33 | 100.23 | 100.42 | 99.81 | 100.72 | 100.66 |
| | | | | | | | | | | | | | | | |
| Si | 2.871 | 2.711 | 2.822 | 2.804 | 2.717 | 2.799 | 2.786 | 2.823 | 2.616 | 2.788 | 2.837 | 2.873 | 2.831 | 2.773 | 2.760 |
| Al | 1.129 | 1.292 | 1.179 | 1.204 | 1.282 | 1.198 | 1.217 | 1.181 | 1.387 | 1.208 | 1.166 | 1.130 | 1.172 | 1.221 | 1.243 |
| $Fe^{+2}$ | 0.002 | 0.001 | 0.001 | 0 | 0.004 | 0.003 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0.001 | 0 | 0 |
| Ca | 0.120 | 0.276 | 0.171 | 0.181 | 0.270 | 0.194 | 0.194 | 0.173 | 0.370 | 0.222 | 0.166 | 0.119 | 0.169 | 0.223 | 0.235 |
| Ba | 0.001 | 0.001 | 0 | 0 | 0 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0.001 | 0 | 0.001 | 0 |
| Na | 0.874 | 0.714 | 0.819 | 0.792 | 0.726 | 0.798 | 0.810 | 0.802 | 0.626 | 0.765 | 0.816 | 0.869 | 0.809 | 0.786 | 0.752 |
| K | 0.010 | 0.010 | 0.011 | 0.018 | 0.011 | 0.014 | 0.002 | 0.017 | 0.008 | 0.016 | 0.006 | 0.011 | 0.010 | 0.012 | 0.013 |
| Sum | 5.007 | 5.005 | 5.004 | 4.999 | 5.010 | 5.008 | 5.012 | 4.996 | 5.008 | 4.999 | 4.991 | 5.003 | 4.993 | 5.015 | 5.001 |
| | | | | | | | | | | | | | | | |
| or | 1 | 1 | 1.1 | 1.8 | 1.1 | 1.4 | 0.2 | 1.7 | 0.8 | 1.6 | 0.6 | 1.1 | 1.1 | 1.1 | 1.3 |
| ab | 86.9 | 71.4 | 81.8 | 79.9 | 72.1 | 79.2 | 80.5 | 80.9 | 62.3 | 76.3 | 82.6 | 86.9 | 81.9 | 77 | 75.3 |
| an | 12 | 27.6 | 17.1 | 18.3 | 26.8 | 19.3 | 19.3 | 17.4 | 36.8 | 22.1 | 16.8 | 11.9 | 17.1 | 21.8 | 23.5 |
| cls | 0.1 | 0.1 | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0 |

## APPENDIX 2B

| | Gromnik | | | | Gębczyce | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profile 2 | | | | Grain | | | Profile 1 | | | | | | | | |
| | 5 | 6 | 7 | 8 | rim | rim | core | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| $SiO_2$ | 62.60 | 63.46 | 63.63 | 65.38 | 64.51 | 64.84 | 61.42 | 65.14 | 65.53 | 65.42 | 65.52 | 62.54 | 63.05 | 62.94 | 62.98 | 63.13 |
| $Al_2O_3$ | 23.05 | 22.90 | 22.73 | 21.93 | 22.59 | 21.93 | 24.01 | 21.29 | 21.81 | 21.7 | 22.11 | 23.05 | 23.17 | 23.50 | 23.02 | 23.03 |
| CaO | 4.41 | 3.79 | 4.17 | 2.63 | 3.04 | 3.14 | 5.82 | 2.80 | 2.89 | 2.86 | 2.99 | 4.89 | 4.95 | 4.74 | 4.58 | 4.61 |
| FeO | 0.02 | 0.06 | 0.02 | 0 | 0.01 | 0.01 | 0 | 0 | 0.04 | 0.01 | 0.03 | 0 | 0.12 | 0.07 | 0.01 | 0 |
| BaO | 0.04 | 0.09 | 0 | 0 | | | | | | | | | | | | |
| $Na_2O$ | 8.68 | 9.52 | 9.49 | 10.19 | 9.89 | 9.89 | 8.32 | 9.90 | 10.27 | 10.07 | 10.14 | 8.92 | 8.85 | 9.23 | 9.10 | 8.97 |
| $K_2O$ | 0.20 | 0.11 | 0.08 | 0.15 | 0.12 | 0.12 | 0.23 | 0.12 | 0.16 | 0.16 | 0.07 | 0.19 | 0.14 | 0.16 | 0.19 | 0.19 |
| Sum | 99 | 99.93 | 100.12 | 100.28 | 100.16 | 99.93 | 99.8 | 99.25 | 100.70 | 100.21 | 100.83 | 99.59 | 100.28 | 100.64 | 99.88 | 99.93 |
| | | | | | | | | | | | | | | | | |
| Si | 2.794 | 2.807 | 2.809 | 2.869 | 2.837 | 2.858 | 2.734 | 2.885 | 2.868 | 2.874 | 2.861 | 2.782 | 2.785 | 2.773 | 2.791 | 2.795 |
| Al | 1.212 | 1.194 | 1.183 | 1.134 | 1.171 | 1.139 | 1.260 | 1.111 | 1.125 | 1.123 | 1.138 | 1.208 | 1.206 | 1.220 | 1.202 | 1.201 |
| $Fe^{+2}$ | 0.001 | 0.002 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0.001 | 0 | 0.001 | 0 | 0.005 | 0.003 | 0 | 0 |
| Ca | 0.211 | 0.180 | 0.197 | 0.123 | 0.143 | 0.148 | 0.277 | 0.133 | 0.135 | 0.135 | 0.140 | 0.233 | 0.234 | 0.224 | 0.217 | 0.219 |
| Ba | 0.001 | 0.002 | 0 | 0 | | | | | | | | | | | | |
| Na | 0.751 | 0.817 | 0.813 | 0.867 | 0.843 | 0.845 | 0.718 | 0.850 | 0.872 | 0.858 | 0.858 | 0.769 | 0.758 | 0.789 | 0.782 | 0.770 |
| K | 0.011 | 0.006 | 0.005 | 0.008 | 0.007 | 0.007 | 0.013 | 0.007 | 0.009 | 0.009 | 0.004 | 0.011 | 0.008 | 0.009 | 0.011 | 0.011 |
| Sum | 4.981 | 5.007 | 5.008 | 5.002 | 5.001 | 4.997 | 5.002 | 4.988 | 5.011 | 4.999 | 5.002 | 5.003 | 4.996 | 5.018 | 5.003 | 4.996 |
| | | | | | | | | | | | | | | | | |
| or | 1.2 | 0.6 | 0.5 | 0.8 | 0.7 | 0.7 | 1.3 | 0.7 | 0.9 | 0.9 | 0.4 | 1 | 0.8 | 0.9 | 1.1 | 1.1 |
| ab | 77.1 | 81.3 | 80.1 | 86.8 | 84.9 | 84.5 | 71.2 | 85.9 | 85.8 | 85.7 | 85.6 | 75.9 | 75.8 | 77.2 | 77.4 | 77.1 |
| an | 21.7 | 17.9 | 19.4 | 12.4 | 14.4 | 14.8 | 27.5 | 13.4 | 13.3 | 13.5 | 14 | 23 | 23.4 | 21.9 | 21.5 | 21.9 |
| cls | 0.1 | 0.2 | 0 | 0 | | | | | | | | | | | | |

## APPENDIX 2C

| | Gębczyce | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profile 1 | | | | | | | | Profile 2 | | | | | | | | |
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| $SiO_2$ | 62.30 | 62.37 | 62.64 | 63.02 | 64.26 | 65.7 | 65.93 | 65.22 | 65.38 | 65.31 | 65.15 | 65.38 | 65.98 | 66.58 | 65.17 | 66.88 | 66.73 |
| $Al_2O_3$ | 23.23 | 23.45 | 23.23 | 22.69 | 21.83 | 21.28 | 21.77 | 21.62 | 21.08 | 21.30 | 21.57 | 21.24 | 21.37 | 20.38 | 20.84 | 20.43 | 20.02 |
| CaO | 4.74 | 4.96 | 4.76 | 4.49 | 3.32 | 2.61 | 2.85 | 2.97 | 2.53 | 2.61 | 2.90 | 2.54 | 2.37 | 1.54 | 1.48 | 1.65 | 1.21 |
| FeO | 0.06 | 0.12 | 0.01 | 0 | 0 | 0.02 | 0 | 0 | 0 | 0 | 0.02 | 0.09 | 0.01 | 0.01 | 0.07 | 0 | 0.10 |
| BaO | | | | | | | | | | | | | | | | | |
| $Na_2O$ | 8.70 | 8.80 | 8.90 | 8.88 | 9.46 | 10.20 | 10.15 | 9.98 | 9.86 | 10.25 | 9.97 | 10.21 | 10.09 | 10.68 | 10.20 | 10.88 | 10.88 |
| $K_2O$ | 0.18 | 0.21 | 0.25 | 0.21 | 0.27 | 0.12 | 0.14 | 0.18 | 0.13 | 0.20 | 0.12 | 0.11 | 0.21 | 0.09 | 0.56 | 0.10 | 0.09 |
| Sum | 99.21 | 99.91 | 99.80 | 99.29 | 99.14 | 99.93 | 100.84 | 99.97 | 98.98 | 99.67 | 99.73 | 99.57 | 100.03 | 99.28 | 98.32 | 99.94 | 99.03 |
| | | | | | | | | | | | | | | | | | |
| Si | 2.779 | 2.768 | 2.78 | 2.806 | 2.856 | 2.891 | 2.877 | 2.872 | 2.900 | 2.884 | 2.875 | 2.889 | 2.897 | 2.939 | 2.911 | 2.935 | 2.952 |
| Al | 1.221 | 1.226 | 1.215 | 1.190 | 1.143 | 1.103 | 1.120 | 1.122 | 1.102 | 1.109 | 1.122 | 1.106 | 1.106 | 1.060 | 1.097 | 1.057 | 1.044 |
| $Fe^{+2}$ | 0.002 | 0.004 | 0 | 0 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0.001 | 0.003 | 0 | 0 | 0.003 | 0 | 0.004 |
| Ca | 0.227 | 0.236 | 0.226 | 0.214 | 0.158 | 0.123 | 0.133 | 0.140 | 0.120 | 0.124 | 0.137 | 0.120 | 0.112 | 0.073 | 0.071 | 0.078 | 0.057 |
| Ba | | | | | | | | | | | | | | | | | |
| Na | 0.752 | 0.757 | 0.766 | 0.766 | 0.815 | 0.870 | 0.859 | 0.853 | 0.848 | 0.878 | 0.853 | 0.875 | 0.859 | 0.914 | 0.884 | 0.926 | 0.933 |
| K | 0.01 | 0.012 | 0.014 | 0.012 | 0.015 | 0.007 | 0.008 | 0.01 | 0.008 | 0.011 | 0.007 | 0.006 | 0.012 | 0.005 | 0.032 | 0.005 | 0.005 |
| Sum | 4.991 | 5.003 | 5.001 | 4.988 | 4.987 | 4.995 | 4.997 | 4.997 | 4.978 | 5.006 | 4.995 | 4.999 | 4.986 | 4.991 | 4.998 | 5.001 | 4.995 |
| | | | | | | | | | | | | | | | | | |
| or | 1.1 | 1.2 | 1.4 | 1.2 | 1.5 | 0.7 | 0.8 | 1 | 0.8 | 1.1 | 0.7 | 0.6 | 1.2 | 0.5 | 3.2 | 0.5 | 0.5 |
| ab | 76 | 75.4 | 76.1 | 77.2 | 82.5 | 87 | 85.9 | 85 | 86.9 | 86.7 | 85.6 | 87.4 | 87.4 | 92.2 | 89.6 | 91.8 | 93.7 |
| an | 22.9 | 23.5 | 22.5 | 21.6 | 16 | 12.3 | 13.3 | 14 | 12.3 | 12.2 | 13.7 | 12 | 11.4 | 7.4 | 7.2 | 7.7 | 5.8 |
| cls | | | | | | | | | | | | | | | | | |

## APPENDIX 2D

| | Górka Sobocka | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profile 1 | | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| $SiO_2$ | 64.66 | 65.27 | 64.85 | 65.70 | 65.96 | 64.11 | 64.17 | 63.15 | 63.51 | 62.13 | 63.36 | 63.97 | 65.12 | 63.01 | 64.47 | 63.59 | 62.70 |
| $Al_2O_3$ | 21.95 | 21.47 | 21.56 | 21.15 | 21.07 | 22.33 | 22.23 | 22.96 | 22.38 | 23.47 | 22.47 | 22.19 | 21.63 | 23.24 | 21.81 | 22.00 | 22.90 |
| CaO | 3.07 | 2.71 | 3.00 | 2.33 | 2.29 | 3.32 | 3.46 | 3.77 | 3.88 | 4.57 | 3.91 | 3.74 | 2.79 | 2.63 | 3.24 | 3.29 | 2.95 |
| FeO | 0 | 0.03 | 0 | 0 | 0 | 0 | 0 | 0.05 | 0.02 | 0.05 | 0 | 0.07 | 0.07 | 0.28 | 0.01 | 0.07 | 0.12 |
| BaO | 0.04 | 0.06 | 0.03 | 0.06 | 0.07 | 0.03 | 0 | 0 | 0.1 | 0.03 | 0.05 | 0.07 | 0.08 | 0.02 | 0 | 0.04 | 0.03 |
| $Na_2O$ | 9.76 | 10.01 | 9.84 | 10.24 | 10.38 | 9.50 | 9.64 | 9.26 | 9.14 | 8.71 | 9.09 | 9.43 | 9.98 | 9.30 | 9.51 | 9.51 | 8.42 |
| $K_2O$ | 0.09 | 0.10 | 0.09 | 0.12 | 0.09 | 0.20 | 0.18 | 0.22 | 0.30 | 0.21 | 0.08 | 0.06 | 0.07 | 0.13 | 0.10 | 0.09 | 0.16 |
| Sum | 99.57 | 99.65 | 99.37 | 99.60 | 99.86 | 99.49 | 99.68 | 99.41 | 99.33 | 99.17 | 98.96 | 99.53 | 99.74 | 98.61 | 99.14 | 98.59 | 97.28 |
| | | | | | | | | | | | | | | | | | |
| Si | 2.859 | 2.882 | 2.872 | 2.899 | 2.903 | 2.840 | 2.839 | 2.805 | 2.825 | 2.772 | 2.823 | 2.836 | 2.874 | 2.812 | 2.861 | 2.843 | 2.827 |
| Al | 1.144 | 1.117 | 1.126 | 1.100 | 1.093 | 1.166 | 1.159 | 1.202 | 1.173 | 1.234 | 1.180 | 1.159 | 1.125 | 1.222 | 1.141 | 1.159 | 1.217 |
| $Fe^{+2}$ | 0 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0.002 | 0.001 | 0.002 | 0 | 0.003 | 0.003 | 0.010 | 0 | 0.003 | 0.004 |
| Ca | 0.145 | 0.128 | 0.142 | 0.110 | 0.108 | 0.158 | 0.164 | 0.179 | 0.185 | 0.219 | 0.187 | 0.178 | 0.132 | 0.126 | 0.154 | 0.158 | 0.142 |
| Ba | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0 | 0 | 0 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 | 0 | 0 | 0.001 | 0 |
| Na | 0.837 | 0.857 | 0.844 | 0.876 | 0.886 | 0.816 | 0.827 | 0.798 | 0.788 | 0.753 | 0.786 | 0.811 | 0.854 | 0.805 | 0.818 | 0.824 | 0.737 |
| K | 0.005 | 0.006 | 0.005 | 0.007 | 0.005 | 0.011 | 0.01 | 0.012 | 0.017 | 0.012 | 0.004 | 0.003 | 0.004 | 0.007 | 0.005 | 0.005 | 0.009 |
| Sum | 4.991 | 4.992 | 4.990 | 4.993 | 4.996 | 4.991 | 4.999 | 4.998 | 4.991 | 4.993 | 4.981 | 4.991 | 4.993 | 4.982 | 4.979 | 4.993 | 4.936 |
| | | | | | | | | | | | | | | | | | |
| or | 0.5 | 0.6 | 0.5 | 0.7 | 0.5 | 1.2 | 1 | 1.2 | 1.7 | 1.2 | 0.5 | 0.3 | 0.4 | 0.8 | 0.6 | 0.5 | 1 |
| ab | 84.7 | 86.4 | 85.1 | 88.1 | 88.6 | 82.8 | 82.6 | 80.6 | 79.5 | 76.5 | 80.4 | 81.7 | 86.2 | 85.8 | 83.7 | 83.5 | 82.9 |
| an | 14.7 | 12.9 | 14.3 | 11.1 | 10.8 | 16 | 16.4 | 18.1 | 18.6 | 22.2 | 19.1 | 17.9 | 13.3 | 13.4 | 15.8 | 16 | 16 |
| cls | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0 | 0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0 | 0.1 | 0.1 |

## APPENDIX 2E

| | Górka Sobocka | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profile 1 | | | | | | | | | | | | | | | | |
| | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
| $SiO_2$ | 64.54 | 64.6 | 63.37 | 64.63 | 63.95 | 63.95 | 64.85 | 62.55 | 64.67 | 64.17 | 63.81 | 63.30 | 64.31 | 63.62 | 63.60 | 64.37 | 64.74 |
| $Al_2O_3$ | 21.93 | 22.23 | 21.78 | 22.11 | 22.17 | 22.30 | 22.15 | 23.02 | 21.90 | 21.92 | 22.32 | 22.57 | 21.88 | 23.07 | 22.57 | 21.88 | 21.50 |
| CaO | 3.07 | 3.27 | 3.67 | 3.28 | 3.13 | 3.04 | 3.14 | 4.62 | 3.13 | 3.48 | 3.21 | 2.89 | 3.32 | 4.30 | 4.03 | 3.32 | 2.98 |
| FeO | 0 | 0.01 | 0 | 0.05 | 0 | 0.03 | 0.08 | 0 | 0.03 | 0 | 0.09 | 0 | 0.02 | 0.02 | 0 | 0 | 0.06 |
| BaO | 0 | 0.01 | 0.03 | 0.02 | 0.02 | 0.02 | 0 | 0.05 | 0 | 0.07 | 0.06 | 0 | 0.01 | 0 | 0.02 | 0 | 0 |
| $Na_2O$ | 9.87 | 9.42 | 9.99 | 10.02 | 10.14 | 9.70 | 9.96 | 8.90 | 9.71 | 9.47 | 9.22 | 9.45 | 9.61 | 9.10 | 9.10 | 9.44 | 9.75 |
| $K_2O$ | 0.15 | 0.12 | 0.38 | 0.11 | 0.55 | 0.08 | 0 | 0.07 | 0.05 | 0.24 | 0.12 | 0.10 | 0.13 | 0.20 | 0.32 | 0.28 | 0.22 |
| Sum | 99.56 | 99.66 | 99.22 | 100.22 | 99.96 | 99.12 | 100.18 | 99.21 | 99.49 | 99.35 | 98.83 | 98.31 | 99.28 | 100.31 | 99.64 | 99.29 | 99.25 |
| | | | | | | | | | | | | | | | | | |
| Si | 2.856 | 2.852 | 2.831 | 2.846 | 2.832 | 2.841 | 2.852 | 2.789 | 2.86 | 2.849 | 2.842 | 2.832 | 2.854 | 2.802 | 2.820 | 2.856 | 2.872 |
| Al | 1.144 | 1.157 | 1.146 | 1.148 | 1.157 | 1.168 | 1.148 | 1.210 | 1.141 | 1.147 | 1.172 | 1.190 | 1.144 | 1.198 | 1.179 | 1.144 | 1.124 |
| $Fe^{+2}$ | 0 | 0 | 0 | 0.002 | 0 | 0.001 | 0.003 | 0 | 0.001 | 0 | 0.004 | 0 | 0.001 | 0.001 | 0 | 0 | 0.002 |
| Ca | 0.145 | 0.154 | 0.176 | 0.155 | 0.148 | 0.144 | 0.148 | 0.221 | 0.148 | 0.166 | 0.153 | 0.139 | 0.158 | 0.203 | 0.192 | 0.158 | 0.142 |
| Ba | 0 | 0 | 0.001 | 0 | 0 | 0 | 0 | 0.001 | 0 | 0.001 | 0.001 | 0 | 0 | 0 | 0 | 0 | 0 |
| Na | 0.847 | 0.806 | 0.865 | 0.855 | 0.871 | 0.835 | 0.849 | 0.769 | 0.833 | 0.815 | 0.796 | 0.819 | 0.827 | 0.778 | 0.782 | 0.812 | 0.839 |
| K | 0.009 | 0.007 | 0.022 | 0.006 | 0.031 | 0.004 | 0 | 0.004 | 0.003 | 0.014 | 0.007 | 0.006 | 0.007 | 0.011 | 0.018 | 0.016 | 0.012 |
| Sum | 5.001 | 4.976 | 5.041 | 5.012 | 5.039 | 4.993 | 5,000 | 4.994 | 4.986 | 4.992 | 4.975 | 4.986 | 4.991 | 4.993 | 4.991 | 4.986 | 4.991 |
| | | | | | | | | | | | | | | | | | |
| or | 0.9 | 0.7 | 2.1 | 0.6 | 3 | 0.4 | 0 | 0.4 | 0.3 | 1.4 | 0.7 | 0.6 | 0.7 | 1.2 | 1.8 | 1.6 | 1.2 |
| ab | 84.6 | 83.3 | 81.4 | 84.2 | 82.9 | 84.9 | 85.2 | 77.3 | 84.6 | 81.9 | 83.2 | 85 | 83.3 | 78.4 | 78.8 | 82.4 | 84.5 |
| an | 14.5 | 16 | 16.5 | 15.2 | 14.1 | 14.7 | 14.8 | 22.2 | 15.1 | 16.6 | 16 | 14.4 | 15.9 | 20.5 | 19.3 | 16 | 14.3 |
| cls | 0 | 0 | 0.1 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0 |

## APPENDIX 2F

| | Górka Sobocka | | | | | | | Gęsiniec | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profile 1 | | | Profile 2 | | | Grain | Grain | | | | | | | | |
| | 35 | 36 | 37 | 1 | 2 | 3 | 1 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| $SiO_2$ | 64.53 | 64.87 | 65.26 | 65.41 | 65.35 | 65.65 | 65.78 | 67.33 | 62.34 | 63.82 | 65.02 | 63.96 | 63.83 | 66.69 | 66.91 | 65.34 |
| $Al_2O_3$ | 21.85 | 21.66 | 21.51 | 21.56 | 20.95 | 21.85 | 21.41 | 20.77 | 23.7 | 22.8 | 22.21 | 22.71 | 23.14 | 20.9 | 21.18 | 21.97 |
| CaO | 3.10 | 3.12 | 2.82 | 2.52 | 1.91 | 2.44 | 0.67 | 1.4 | 5.26 | 4.03 | 3.26 | 4.09 | 4.16 | 1.77 | 1.79 | 2.72 |
| FeO | 0 | 0.01 | 0 | 0 | 0.08 | 0.07 | 0.08 | 0 | 0 | 0.05 | 0 | 0.03 | 0 | 0 | 0.09 | 0 |
| BaO | 0 | 0.03 | 0 | 0 | 0 | 0.03 | 0 | | | | | | | | | |
| $Na_2O$ | 9.50 | 9.85 | 9.87 | 9.87 | 10.06 | 10.14 | 10.88 | 11.06 | 8.82 | 9.38 | 9.97 | 9.29 | 9.36 | 10.63 | 10.61 | 9.94 |
| $K_2O$ | 0.27 | 0.22 | 0.13 | 0.08 | 0.03 | 0.08 | 0.06 | 0.13 | 0.11 | 0.10 | 0.06 | 0.12 | 0.09 | 0.12 | 0.11 | 0.25 |
| Sum | 99.25 | 99.76 | 99.59 | 99.44 | 98.38 | 100.26 | 98.88 | 100.69 | 100.23 | 100.18 | 100.52 | 100.20 | 100.58 | 100.11 | 100.69 | 100.22 |
| | | | | | | | | | | | | | | | | |
| Si | 2.862 | 2.866 | 2.881 | 2.887 | 2.911 | 2.878 | 2.911 | 2.932 | 2.758 | 2.814 | 2.850 | 2.818 | 2.803 | 2.921 | 2.915 | 2.868 |
| Al | 1.142 | 1.128 | 1.119 | 1.121 | 1.100 | 1.129 | 1.117 | 1.066 | 1.236 | 1.184 | 1.147 | 1.18 | 1.198 | 1.079 | 1.087 | 1.137 |
| $Fe^{+2}$ | 0 | 0 | 0 | 0 | 0.003 | 0.003 | 0.003 | 0 | 0 | 0.002 | 0 | 0.001 | 0 | 0 | 0.003 | 0 |
| Ca | 0.147 | 0.148 | 0.133 | 0.119 | 0.091 | 0.115 | 0.032 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ba | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.065 | 0.249 | 0.191 | 0.153 | 0.193 | 0.196 | 0.083 | 0.083 | 0.128 |
| Na | 0.817 | 0.844 | 0.845 | 0.845 | 0.869 | 0.862 | 0.934 | 0.934 | 0.756 | 0.802 | 0.847 | 0.794 | 0.797 | 0.903 | 0.897 | 0.846 |
| K | 0.015 | 0.012 | 0.007 | 0.004 | 0.001 | 0.004 | 0.003 | 0.007 | 0.006 | 0.005 | 0.003 | 0.007 | 0.005 | 0.007 | 0.006 | 0.014 |
| Sum | 4.983 | 4.998 | 4.985 | 4.976 | 4.975 | 4.991 | 5.000 | 5.005 | 5.006 | 4.998 | 5.001 | 4.992 | 4.999 | 4.994 | 4.992 | 4.993 |
| | | | | | | | | | | | | | | | | |
| or | 1.5 | 1.2 | 0.8 | 0.5 | 0.2 | 0.4 | 0.3 | 0.7 | 0.6 | 0.5 | 0.3 | 0.7 | 0.5 | 0.7 | 0.6 | 1.4 |
| ab | 83.4 | 84 | 85.7 | 87.2 | 90.4 | 87.8 | 96.4 | 92.8 | 74.7 | 80.4 | 84.4 | 79.9 | 79.9 | 90.9 | 90.9 | 85.6 |
| an | 15 | 14.7 | 13.5 | 12.3 | 9.5 | 11.7 | 3.3 | 6.5 | 24.6 | 19.1 | 15.3 | 19.4 | 19.6 | 8.4 | 8.5 | 13 |
| cls | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | |

## APPENDIX 2G

| | Strzelin I Quarry | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Profile 1 | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| $SiO_2$ | 67.02 | 64.11 | 65.44 | 64.78 | 64.71 | 66.43 | 66.75 | 65.22 | 64.65 | 63.43 | 62.29 | 63.63 | 64.00 | 66.59 | 62.86 |
| $Al_2O_3$ | 20.7 | 22.31 | 21.46 | 22.04 | 22.34 | 20.59 | 21.83 | 22.6 | 23.16 | 23.12 | 23.18 | 22.92 | 22.78 | 20.70 | 22.92 |
| CaO | 1.19 | 2.93 | 2.11 | 2.83 | 2.80 | 1.45 | 2.27 | 3.26 | 3.63 | 3.83 | 4.31 | 3.78 | 3.32 | 1.22 | 3.89 |
| FeO | 0 | 0 | 0 | 0 | 0 | 0 | 0.02 | 0.06 | 0.01 | 0.03 | 0 | 0 | 0.02 | 0.02 | 0.02 |
| BaO | 0.04 | 0.06 | 0.04 | 0 | 0.02 | 0.04 | 0 | 0.04 | 0 | 0 | 0 | 0.04 | 0.02 | 0.02 | 0 |
| $Na_2O$ | 10.64 | 9.58 | 10.20 | 9.80 | 9.85 | 10.70 | 9.70 | 8.98 | 8.96 | 8.97 | 8.90 | 9.28 | 9.57 | 10.73 | 9.11 |
| $K_2O$ | 0.26 | 0.45 | 0.07 | 0.11 | 0.24 | 0.18 | 0.20 | 0.34 | 0.31 | 0.31 | 0.34 | 0.29 | 0.13 | 0.31 | 0.21 |
| Sum | 99.85 | 99.44 | 99.32 | 99.56 | 99.96 | 99.39 | 100.77 | 100.50 | 100.72 | 99.69 | 99.02 | 99.94 | 99.84 | 99.59 | 99.01 |
| | | | | | | | | | | | | | | | |
| Si | 2.939 | 2.843 | 2.892 | 2.861 | 2.850 | 2.931 | 2.901 | 2.853 | 2.826 | 2.807 | 2.784 | 2.812 | 2.825 | 2.932 | 2.803 |
| Al | 1.070 | 1.166 | 1.118 | 1.147 | 1.160 | 1.071 | 1.118 | 1.165 | 1.193 | 1.206 | 1.221 | 1.194 | 1.185 | 1.074 | 1.205 |
| $Fe^{+2}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0.001 | 0.002 | 0 | 0.001 | 0 | 0 | 0.001 | 0.001 | 0.001 |
| Ca | 0.056 | 0.139 | 0.1 | 0.134 | 0.132 | 0.068 | 0.106 | 0.153 | 0.170 | 0.182 | 0.206 | 0.179 | 0.157 | 0.058 | 0.186 |
| Ba | 0.001 | 0.001 | 0.001 | 0 | 0 | 0.001 | 0 | 0.001 | 0 | 0 | 0 | 0.001 | 0 | 0 | 0 |
| Na | 0.905 | 0.824 | 0.874 | 0.839 | 0.841 | 0.915 | 0.817 | 0.762 | 0.759 | 0.770 | 0.771 | 0.795 | 0.819 | 0.916 | 0.788 |
| K | 0.015 | 0.025 | 0.004 | 0.006 | 0.013 | 0.010 | 0.011 | 0.019 | 0.017 | 0.017 | 0.019 | 0.017 | 0.007 | 0.018 | 0.012 |
| Sum | 4.986 | 4.998 | 4.989 | 4.987 | 4.996 | 4.996 | 4.954 | 4.955 | 4.965 | 4.983 | 5.001 | 4.998 | 4.994 | 4.999 | 4.995 |
| | | | | | | | | | | | | | | | |
| or | 1.5 | 2.6 | 0.4 | 0.6 | 1.3 | 1 | 1.2 | 2 | 1.8 | 1.8 | 1.9 | 1.7 | 0.7 | 1.8 | 1.2 |
| ab | 92.7 | 83.3 | 89.3 | 85.7 | 85.2 | 92 | 87.5 | 81.6 | 80.2 | 79.5 | 77.4 | 80.2 | 83.3 | 92.4 | 79.9 |
| an | 5.7 | 14.1 | 10.2 | 13.7 | 13.4 | 6.9 | 11.3 | 16.3 | 18 | 18.7 | 20.7 | 18.1 | 16 | 5.8 | 18.8 |
| cls | 0.1 | 0.1 | 0.1 | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0 |