

APPENDIX 3

Chemical EMP and calculated phase composition of diopside and Al-diopside forming host rock, clasts and unequilibrated inclusions in the Pułtusk breccia

| [wt. %] | H3.8 inclusions | | H4/H5 host rock | | | | Clasts H5 and H6 | | | |
|--------------------------------|-----------------|--------|-----------------|-------|-------|-------|------------------|-------|-------|-------|
| Al ₂ O ₃ | 3.94 | 5.77 | 0.45 | 0.43 | 0.68 | 0.30 | 0.55 | 0.47 | 0.51 | 0.50 |
| MgO | 15.41 | 15.69 | 18.07 | 17.41 | 16.92 | 17.02 | 16.59 | 16.99 | 17.00 | 16.78 |
| SiO ₂ | 51.88 | 48.74 | 53.89 | 53.64 | 52.96 | 54.10 | 53.59 | 54.17 | 53.40 | 53.67 |
| TiO ₂ | 1.04 | 2.62 | 0.36 | 0.33 | 0.57 | 0.26 | 0.47 | 0.35 | 0.43 | 0.44 |
| CaO | 22.01 | 21.53 | 22.67 | 22.74 | 23.14 | 22.86 | 22.24 | 22.30 | 22.28 | 22.58 |
| FeO | 3.13 | 3.25 | 3.82 | 3.74 | 3.93 | 3.74 | 3.84 | 3.98 | 4.13 | 3.53 |
| MnO | 0.27 | 0.14 | 0.26 | 0.31 | 0.23 | 0.20 | 0.24 | 0.27 | 0.25 | 0.21 |
| Cr ₂ O ₃ | 1.75 | 1.74 | 0.68 | 0.73 | 0.86 | 0.82 | 1.00 | 0.89 | 0.79 | 0.77 |
| NiO | b.d. | b.d. | b.d. | b.d. | 0.06 | b.d. | b.d. | b.d. | b.d. | 0.03 |
| Na ₂ O | 0.95 | 0.88 | 0.47 | 0.50 | 0.60 | 0.52 | 0.54 | 0.55 | 0.52 | 0.47 |
| K ₂ O | b.d. | b.d. | b.d. | b.d. | b.d. | b.d. | b.d. | b.d. | b.d. | b.d. |
| Total | 100.39 | 100.36 | 100.68 | 99.83 | 99.93 | 99.80 | 99.07 | 99.96 | 99.30 | 98.99 |
| En [mol%] | 46.71 | 47.56 | 49.50 | 48.55 | 47.33 | 47.88 | 47.78 | 48.20 | 48.12 | 47.96 |
| Fs [mol%] | 5.33 | 5.53 | 5.86 | 5.86 | 6.16 | 5.90 | 6.20 | 6.33 | 6.56 | 5.66 |
| Wo [mol%] | 47.97 | 46.91 | 44.64 | 45.59 | 46.51 | 46.22 | 46.02 | 45.48 | 45.32 | 46.38 |

b.d. – below detection limit