**Table A6:** Bulk magnetic susceptibility in the rock samples (measured with the SM-30 instrument).

**Lime kilns**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample No.** | **Rock** | commune | kiln | **individual measurements of MS (10-3 SI)** | | | | | | | | | |
| **Ko-003** | Sandstone | Seeshaupt | Kohlstatt | 0.057 | 0.0378 | 0.027 | 0.0636 | 0.0152 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-004** | Gneiss | Seeshaupt | Kohlstatt | 0.438 | 0.239 | 0.115 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-006** | Vein quartz | Seeshaupt | Kohlstatt | 0.163 | 0.453 | 0.781 | 2.2 | 4.32 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-007** | Amphibolite ("slag") | Seeshaupt | Kuhberg | 8.6 | 15.4 | 3.47 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-008** | Quartzite | Seeshaupt | Kohlstatt | 0.286 | 0.278 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-009** | Gneiss | Seeshaupt | Kuhberg | 0.728 | 0.912 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-010** | Gneiss | Seeshaupt | Kohlstatt | 0.64 | 0.1 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-011** | Burnt loam | Seeshaupt | Kohlstatt | 11.3 | 5.86 | 7.37 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-014** | Gneiss | Seeshaupt | Kohlstatt | 0.275 | 0.511 | 0.619 | 0.102 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-036** | Gneiss | Seeshaupt | Kohlstatt | 0.0248 | 0.054 | 0.0006 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-053** | Amphibolite (?) | Seeshaupt | Bonholz | 2.51 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-055** | Gneiss | Eberfing | Pollingsried | 0.645 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-064** | Granite | Eberfing | Pollingsried | 3.61 | 2.28 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-081** | Intermediate rock | Seeshaupt | Wolfetsried | 3.11 |  |  |  |  |  |  |  |  |  |
|  | the same with lime |  |  | 1.08 | 1.24 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-085** | Amphibolite | Seeshaupt | Kohlstatt | 2.3 | 1.73 | 1.69 | 1.12 | 1.48 | 1.83 | 2.16 | 1.39 | 1.45 | 1.55 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-087** | Gneiss | Seeshaupt | Kuhberg | 0.289 | 0.564 | 0.405 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-092** | Gneiss | Seeshaupt | Kuhberg | 3.82 | 13.1 | 3.09 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-110** | Gneiss | Eberfing | Tradfranz 1 | 0.208 | 0.0605 | 0.179 | 0.0759 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-123** | Gneiss | Eberfing | Eichendorf 1 | 3.62 | 3.41 | 1.67 | 1.37 | 1.43 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Ko-124** | Gneiss | Eberfing | Eichendorf 1 | 0.0966 | 0.135 |  |  |  |  |  |  |  |  |

**The Kaltenbach structure** (note that additional samples 111, 112, 113 and 115 are limestone fragments too small for magnetometry)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **sample No.** | **individual measurements of MS (10-3 SI)** | | | |  | **sample description** |
| limestones | **101** | 0.852 | 1.34 | 0.794 | 0.465 |  | compact, with triangular cross-section; possibly formerly decarbonized porous coating in places |
| **102** | 0.0948 | 0.0692 | 0.232 | 0.127 |  | 3 clasts of grey limestone (two higher values of MS are influenced by them) pushed into relatively bright limestone; fracturing |
| **103** | 0.081 | 0.067 | 0.064 | 0.067 |  | slightly brecciated; white coating ("chalk") |
| **104** | 0.0359 | 0.0238 | 0.0313 | 0.0046 |  | brecciated surface; white "chalk" |
| **105** | 0.0248 | 0.0244 | 0.146 | 0.0294 |  | re-carbonized lime (portlandite relics below the crust), probably with mortar |
| **106** | 0.1 | 0.0897 | 0.0802 | 0.158 |  | sharp-edged fragment (relatively small) |
| **107** | 0.985 | 1.31 | 0.628 | 0.746 |  | filled fractures (2 systems), protruding in places |
| **109** | -0.0145 | -0.0051 | -0.0129 | -0.0128 |  | older fractures and veinlets, protruding in places |
| **110** | 0.0371 | 0.0385 | 0.0211 | 0.018 |  | sharp-edged fragment |
| **116** | 0.932 | 1.14 | 0.334 | 0.5 |  | large; grey interior, relatively bright coatings in places |
| **117** | 2.3 | 1.4 | 1.48 | 0.595 |  | large, with abundant fossils; grey interior, relatively bright coatings in places |
| **119** | -0.0153 | -0.0133 | 0.036 | -0.0179 |  | limestone breccia with orange domains |
| **120** | 2.43 | 2.59 | 0.778 | 0.7 |  | originally one pebble broken along a calcite vein; limonitic coating (possibly slightly hematitized); furrows (root imprints?) |
| **122** | 0.659 | 0.552 | 0.556 | 0.562 |  |
| silicates | **108** | 1.04 | 1.09 | 0.799 | 2.68 |  | granulite or similar metamorphic rock (broken – less than half of the original pebble) |
| **114** | 0.356 | 0.296 | 0.355 | 0.204 |  | sandstone, possibly quartzite |
| **118** | 15.7 | 11.1 | 1.69 | 2.61 |  | sandstone (transition from green-bluis interior to reddish rim) |
| **121** | 19 | 17.8 | 22.2 | 22.6 |  | metamorphosed siltstone or artificial brick-like material |
| **123** | 0.299 | 0.322 | 0.397 | 0.423 |  | orthogneiss (deformed acidic granite); green glass up to 4 mm thick, melting inside |
|  | **124** | 3.07 | 2.28 | 1.37 | 2.66 |  | impure sandstone partlly melted and expanded; calcite veinlets and violett coating |
|  | **125** | 4.16 | 4.31 | 3.79 | 4.97 |  | volcanic or strongly altered metavolcanic rock, melted (from one side) |

**Crater No. 4** (only samples not presented in Table A3)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample No.** | **Rock** | **individual measurements of MS (10-3 SI)** | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |
| **423** | Vein quartz? | 0.296 | 0.395 | 0.423 | 1.09 | 0.62 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **16131** | Gneiss (quartzitic?) | 1.13 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **16133** | Orthogneiss | 0.0329 | -0.016 | 0.0574 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **16134** | Limestone | -0.057 | -0.065 | -0.045 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/-5b** | Granitoid | 0.146 | 0.346 | 0.519 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/1/-3 a** | Sandy limestone | 0.811 | 0.397 | 0.187 | 0.112 | 0.104 | 0.768 | 0.0301 |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/1/-3 b** | Orthogneiss? | 0.166 | 0.408 | 0.242 | 0.543 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/-5a 1** | Vein quartz | -0.148 | 0.04 | 0.062 | 0.0776 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/-5a 2** | Vein quartz | 2.24 | 3.11 | 0.969 | 1.89 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/-5a 3** | Vein quartz | 0.272 | 0.195 | 0.27 | 0.0435 | 0.094 | 0.117 |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/-3** | Limestone | 0.951 |  |  |  |  |  |  |  |
|  | the same with orange fracture filling | 2.06 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/-1 a** | Quartzite with quartz vein? | 3.35 | 5.01 | 1.37 | 1.79 | 1.11 | 3.53 | 4.92 | 4.65 |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/-1 b** | Granitoid? (expanded) | 0.341 | 0.181 | 0.774 | 1.19 |  |  |  |  |
|  | the same with dark contaminations | 1.95 | 3.78 | 1.68 |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| **4/2/1b 1** | Limestone | 0.416 |  |  |  |  |  |  |  |
| **4/2/1b 2** | Basic rock | 1.44 | 3.65 | 2.27 |  |  |  |  |  |
| **4/2/1b 3** | Gneiss | 0.273 | 0.353 | 0.539 | 0.347 |  |  |  |  |
| **4/2/1b 4** | Vein quartz? | 0.596 | 0.904 | 0.624 |  |  |  |  |  |

**Crater No. 5**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample No.** | **Rock** | **individual measurements of MS (10-3 SI)** | | | | | |
| **5/1/0a** | Impure quartzite | 5.68 | 5.61 | 5.21 |  |  |  |
|  |  |  |  |  |  |  |  |
| **5/1/0b 1** | Intermediate rock? | 5.48 | 2.88 | 2.79 | 5.1 | 2.65 | 3.87 |
| **5/1/0b 2** | (Meta)sedimentary rock (graywacke?) | 0.738 | 0.914 | 1.21 |  |  |  |