

| Sample | Si | S | Fe | Co | Ni | Cu | Zn | Total | Fe/Ni | Ni/Cu |
|--------------|------|-------|-------|------|-------|-------|------|--------|-------|--------|
| KH03-11_A1 | 0.03 | 36.69 | 45.34 | 0.31 | 16.03 | 0.61 | 0 | 99.00 | 2.89 | 30.91 |
| KH03-11_A1 | 0.01 | 33.20 | 31.15 | 0.46 | 34.14 | 1.31 | 0 | 100.27 | 0.91 | 30.55 |
| KH03-14_A10 | 0 | 37.48 | 44.28 | 0.31 | 16.02 | 0.78 | 0 | 98.87 | 2.77 | 22.50 |
| KH03-14_A10 | 0 | 37.16 | 48.88 | 0.23 | 8.89 | 4.44 | 0 | 99.61 | 5.50 | 2.00 |
| KH03-14_A10 | 0 | 34.81 | 40.17 | 0.14 | 1.74 | 20.99 | 0.02 | 97.86 | 23.07 | 0.08 |
| KH03-14_A9 | 0.00 | 37.35 | 45.50 | 0.31 | 15.03 | 0.63 | 0 | 98.83 | 3.04 | 27.52 |
| KH03-14_A8 | 0 | 36.37 | 43.70 | 0.28 | 17.71 | 0.44 | 0 | 98.50 | 2.63 | 43.40 |
| KH03-14_A8 | 0 | 35.25 | 39.97 | 0.19 | 11.40 | 11.69 | 0.01 | 98.51 | 7.11 | 1.03 |
| KH03-14_A9 | 0 | 35.15 | 39.75 | 0.13 | 1.92 | 21.44 | 0.01 | 98.40 | 20.83 | 0.09 |
| KH03-14_A7 | 1.15 | 35.08 | 35.84 | 0.36 | 19.50 | 4.56 | 0.02 | 96.50 | 22.45 | 0.08 |
| KH03-14_A7 | 0 | 37.49 | 44.63 | 0.30 | 16.13 | 0.66 | 0 | 99.21 | 2.78 | 27.74 |
| KH03-14_A6 | 0 | 37.24 | 47.52 | 0.26 | 13.30 | 0.44 | 0 | 98.76 | 3.75 | 33.99 |
| KH03-14_A5 | 0 | 37.19 | 44.18 | 0.29 | 17.05 | 0.77 | 0 | 99.48 | 2.69 | 26.61 |
| KH03-14_A4 | 0 | 37.50 | 45.33 | 0.30 | 15.76 | 0.73 | 0 | 99.63 | 2.89 | 22.56 |
| KH03-14_A3 | 0.01 | 38.08 | 45.09 | 0.30 | 14.78 | 0.37 | 0 | 98.63 | 3.05 | 40.37 |
| KH03-14_A2 | 0 | 37.64 | 45.99 | 0.31 | 14.66 | 0.55 | 0.01 | 99.16 | 3.14 | 26.80 |
| KH03-14_A1 | 0 | 37.31 | 45.98 | 0.31 | 15.14 | 0.77 | 0 | 99.52 | 3.08 | 25.37 |
| KH03-15_1.1 | 0 | 34.71 | 35.01 | 0.30 | 28.76 | 0.68 | 0 | 99.47 | 1.27 | 54.33 |
| KH03-17_A1 | 0 | 37.93 | 38.17 | 0.29 | 23.26 | 0.23 | 0 | 99.87 | 1.66 | 155.70 |
| KH03-17_A2 | 0 | 37.75 | 35.64 | 0.29 | 25.88 | 0.31 | 0.01 | 99.87 | 1.38 | 106.04 |
| KH03-21_1.1 | 0 | 32.61 | 35.26 | 0.29 | 29.39 | 1.72 | 0 | 99.27 | 1.20 | 17.04 |
| KH03-21_1.1 | 0 | 32.79 | 33.87 | 0.30 | 27.32 | 4.68 | 0 | 98.96 | 1.25 | 5.89 |
| KH03-21_1.2 | 0 | 33.15 | 36.13 | 0.29 | 28.45 | 1.71 | 0 | 99.74 | 1.28 | 18.32 |
| KH03-21_1.2 | 0 | 33.12 | 35.02 | 0.30 | 26.90 | 4.61 | 0 | 99.95 | 1.30 | 5.84 |
| KH03-21_1.3 | 0 | 32.41 | 31.81 | 0.33 | 31.95 | 1.84 | 0 | 98.34 | 1.00 | 18.83 |
| KH03-21_1.3 | 0 | 37.50 | 51.19 | 0.17 | 8.79 | 0.12 | 0 | 97.78 | 5.86 | 76.16 |
| KH03-21_2.1 | 0 | 37.32 | 45.54 | 0.32 | 16.27 | 0.28 | 0.01 | 99.74 | 2.80 | 59.15 |
| KH03-21_2.2 | 0 | 37.12 | 38.23 | 0.28 | 23.86 | 0.20 | 0.02 | 99.71 | 1.60 | 118.13 |
| KH03-21_2.2 | 0 | 34.17 | 38.63 | 0.09 | 2.69 | 22.59 | 0 | 98.17 | 14.34 | 0.12 |
| KH03-21_3.1 | 0 | 36.61 | 44.66 | 0.32 | 16.26 | 0.51 | 0 | 98.36 | 2.76 | 36.69 |
| KH03-21_3.2 | 0.08 | 32.06 | 34.91 | 0.30 | 28.27 | 2.23 | 0 | 97.85 | 1.24 | 13.28 |
| KH03-21_3.2 | 0 | 32.34 | 35.15 | 0.24 | 21.26 | 9.25 | 0 | 98.24 | 1.65 | 2.30 |
| KH03-21_4.1 | 0.02 | 36.61 | 51.03 | 0.29 | 10.86 | 0.53 | 0 | 99.34 | 4.74 | 22.18 |
| KH03-21_4.1 | 0 | 33.99 | 37.41 | 0.63 | 28.43 | 0.32 | 0 | 100.77 | 1.32 | 89.11 |
| KH03-22_A1 | 0.02 | 33.00 | 30.58 | 0.25 | 34.08 | 1.64 | 0 | 99.56 | 0.90 | 20.83 |
| KH03-22_A3 | 0 | 37.28 | 44.37 | 0.27 | 17.17 | 0.62 | 0 | 99.71 | 2.59 | 27.73 |
| KH03-22_A3 | 0.02 | 33.16 | 31.20 | 0.29 | 33.46 | 1.65 | 0 | 99.79 | 0.93 | 20.61 |
| KH03-22_A3 | 0 | 34.10 | 32.16 | 0.28 | 29.88 | 4.26 | 0 | 100.68 | 1.08 | 7.02 |
| KH03-22_A4 | 0.20 | 32.31 | 30.09 | 0.28 | 34.77 | 1.21 | 0 | 98.85 | 0.87 | 28.78 |
| KH03-22_A4 | 0 | 37.76 | 43.64 | 0.28 | 17.75 | 0.39 | 0 | 99.81 | 2.46 | 45.75 |
| KH03-22_A5 | 0 | 37.84 | 41.91 | 0.24 | 19.17 | 0.45 | 0 | 99.62 | 2.19 | 44.56 |
| KH03-22_A5 | 0.09 | 33.10 | 28.58 | 0.29 | 36.16 | 0.95 | 0 | 99.17 | 1.32 | 89.11 |
| KH03-22_A6 | 0 | 37.39 | 42.94 | 0.24 | 18.69 | 0.49 | 0 | 99.75 | 2.30 | 38.53 |
| KH03-22_B1.1 | 0 | 37.28 | 45.47 | 0.20 | 14.38 | 0.32 | 0 | 97.65 | 3.16 | 45.35 |
| KH03-22_B1.2 | 0.03 | 34.70 | 36.35 | 0.30 | 28.23 | 0.47 | 0 | 100.07 | 1.29 | 59.82 |
| KH03-22_B1.3 | 0.06 | 38.29 | 44.18 | 0.25 | 16.13 | 0.30 | 0 | 99.22 | 1.32 | 89.11 |
| KH03-22_B1.4 | 0.19 | 33.18 | 30.75 | 0.32 | 31.54 | 2.12 | 0 | 98.09 | 1.32 | 89.11 |
| KH03-22_B1.4 | 0.03 | 38.17 | 48.15 | 0.23 | 12.55 | 0.41 | 0.02 | 99.57 | 3.84 | 30.62 |
| KH03-22_B2 | 0.01 | 36.18 | 40.99 | 0.24 | 19.65 | 0.54 | 0.01 | 97.63 | 2.09 | 36.19 |
| KH03-22_B3.1 | 0.02 | 33.02 | 31.86 | 0.32 | 31.93 | 1.59 | 0 | 98.74 | 1.00 | 20.88 |
| KH03-22_B3.1 | 0 | 37.36 | 47.66 | 0.22 | 13.09 | 0.55 | 0 | 98.89 | 3.66 | 25.68 |
| KH03-22_B3.2 | 0 | 32.71 | 30.02 | 0.30 | 34.07 | 1.11 | 0 | 98.21 | 0.88 | 30.69 |
| KH03-22_B3.2 | 0 | 37.25 | 43.34 | 0.24 | 17.56 | 0.23 | 0 | 98.62 | 2.47 | 78.06 |
| KH03-22_B4.2 | 0.07 | 36.98 | 43.82 | 0.27 | 16.95 | 0.46 | 0.01 | 98.57 | 2.65 | 44.96 |
| KH03-22_B4.1 | 0 | 33.49 | 30.94 | 0.29 | 32.71 | 1.00 | 0 | 98.42 | 0.95 | 32.71 |
| KH03-22_B4.1 | 0 | 37.44 | 40.68 | 0.28 | 19.94 | 0.56 | 0 | 98.91 | 2.05 | 33.00 |
| KH03-23_A1 | 0.01 | 34.21 | 36.11 | 0.04 | 1.10 | 25.91 | 0.01 | 97.39 | 32.74 | 0.04 |

Table 1.3. Major element composition of sulphide grains from Kilbourne Hole xenoliths. All measurements performed by electron microprobe at The Open University.