Table 1. Chemical analysis of all flotation products.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Seq. Sample name (1- |  | Cu | Zn | Pb | MgO | Fe | S | SiO2 | As | Mn | Hg | Bi | Sb | Na2O | Al2O3 | K2O | CaO |
|  |  | Cu | Zn | Pb | Mg | Fe | S | Si | As | Mn | Hg | Bi | Sb | Na | Al | K | Ca |
|  |  | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| Zn3 Concentrate | 16 | 0.07 | 0.36 | 0.18 | 6.98 | 23.49 | 17.83 | 31.21 | 0.09 | 0.09 | -0 | 0 | 0 | 0.25 | 5.07 | 0.49 | 2.99 |
| Zn2 Concentrate |  | 0.12 | 1.92 | 0.27 | 7.75 | 20.84 | 14.45 | 33.33 | 0.15 | 0.1 | 0 | 0 | 0.01 | 0.25 | 5.41 | 0.53 | 3.39 |
| Zn1 Concentrate |  | 0.21 | 27.9 | 0.53 | 4.9 | 15.45 | 19.02 | 15.64 | 0.13 | 0.08 | 0.01 | 0 | 0.03 | 0.05 | 3.33 | 0.27 | 2.01 |
| CuPb3 Concentrate |  | 0.49 | 5.3 | 0.74 | 9.08 | 12.14 | 9.272 | 39.14 | 0.07 | 0.11 | 0 | 0 | 0.02 | 0.22 | 6.21 | 0.67 | 3.73 |
| CuPb2 Concentrate |  | 3.63 | 7.59 | 2.63 | 7.74 | 15.41 | 13.93 | 29.23 | 0.08 | 0.09 | 0 | 0.01 | 0.07 | 0.16 | 4.53 | 0.46 | 2.81 |
| CuPb1 Concentrate |  | 11.8 | 5.46 | 3.27 | 4.82 | 19.89 | 19.3 | 19.87 | 0.05 | 0.07 | 0 | 0 | 0.07 | 0.15 | 3.01 | 0.29 | 1.92 |
| tailing |  | 0.03 | 0.14 | 0.05 | 7.36 | 6.263 | 2.697 | 49.55 | 0.02 | 0.13 |  |  |  | 0.27 | 7.13 | 0.91 | 5.58 |
| Zn3 Concentrate | 10 | 0.08 | 0.36 | 0.19 | 6.76 | 27.38 | 20.57 | 26.77 | 0.1 | 0.08 | -0 | 0 | 0 | 0.23 | 4.58 | 0.43 | 2.5 |
| Zn2 Concentrate |  | 0.14 | 2.22 | 0.31 | 7.69 | 26.1 | 18.6 | 27.62 | 0.18 | 0.08 | 0 | 0 | 0.01 | 0.22 | 4.84 | 0.44 | 2.65 |
| Zn1 Concentrate |  | 0.2 | 29.2 | 0.53 | 4.67 | 15.32 | 19.3 | 14.46 | 0.13 | 0.07 | 0.02 | 0 | 0.02 | 0.06 | 3.16 | 0.26 | 1.85 |
| CuPb3 Concentrate |  | 0.46 | 5.68 | 0.71 | 9.01 | 12.29 | 9.681 | 39.17 | 0.06 | 0.11 | 0 | 0 | 0.02 | 0.23 | 6.2 | 0.67 | 3.62 |
| CuPb2 Concentrate |  | 3.39 | 8.62 | 2.3 | 7.67 | 15.45 | 13.98 | 28.25 | 0.07 | 0.09 | 0.01 | 0 | 0.07 | 0.14 | 4.6 | 0.47 | 2.73 |
| CuPb1 Concentrate |  | 11.6 | 5.9 | 3.18 | 4.64 | 19.94 | 19.24 | 19.47 | 0.05 | 0.06 | 0.01 | 0.01 | 0.08 | 0.14 | 2.96 | 0.3 | 1.88 |
| tailing |  | 0.03 | 0.13 | 0.05 | 7.51 | 6.175 | 2.61 | 51.01 | 0.02 | 0.12 |  |  |  | 0.28 | 7.32 | 0.94 | 5.38 |
| Zn3 Concentrate | 9 | 0.08 | 0.41 | 0.22 | 7.09 | 26.22 | 20.14 | 28.51 | 0.11 | 0.08 | -0 | 0 | 0.01 | 0.23 | 4.89 | 0.45 | 2.68 |
| Zn2 Concentrate |  | 0.16 | 2.73 | 0.38 | 8.08 | 24.13 | 16.59 | 28.7 | 0.19 | 0.09 | 0 | 0 | 0.02 | 0.24 | 5.15 | 0.47 | 2.9 |
| Zn1 Concentrate |  | 0.22 | 31.7 | 0.66 | 4.01 | 14.95 | 20.01 | 12.67 | 0.14 | 0.07 | 0.02 | 0 | 0.02 | -0 | 2.67 | 0.22 | 1.7 |
| CuPb3 Concentrate |  | 0.47 | 5.22 | 0.84 | 8.54 | 12.11 | 9.081 | 38.65 | 0.07 | 0.11 | 0 | 0 | 0.02 | 0.2 | 5.91 | 0.66 | 3.73 |
| CuPb2 Concentrate |  | 3.13 | 6.86 | 2.44 | 7.85 | 14.59 | 12.42 | 30.79 | 0.07 | 0.1 | 0 | 0 | 0.07 | 0.16 | 4.9 | 0.51 | 3 |
| CuPb1 Concentrate |  | 13.4 | 5.22 | 2.82 | 4.52 | 20.81 | 20.02 | 18.12 | 0.04 | 0.06 | 0 | 0 | 0.08 | 0.13 | 2.74 | 0.27 | 1.77 |
| tailing |  | 0.03 | 0.15 | 0.06 | 7.47 | 6.387 | 2.713 | 49.39 | 0.02 | 0.12 |  |  |  | 0.29 | 7.26 | 0.91 | 5.47 |
| Zn3 Concentrate | 1` | 0.09 | 0.32 | 0.14 | 6.8 | 26.95 | 20.29 | 26.72 | 0.09 | 0.08 | -0 | 0 | 0 | 0.21 | 4.51 | 0.42 | 2.74 |
| Zn2 Concentrate |  | 0.15 | 1.49 | 0.22 | 6.68 | 32.51 | 23.3 | 20.16 | 0.18 | 0.07 | 0 | 0 | 0.01 | 0.19 | 3.68 | 0.3 | 2.02 |
| Zn1 Concentrate |  | 0.26 | 21.5 | 0.52 | 5.36 | 20.89 | 19.63 | 15.14 | 0.21 | 0.07 | 0.01 | 0 | 0.04 | 0.09 | 2.9 | 0.25 | 1.98 |
| CuPb3 Concentrate |  | 0.66 | 9.21 | 0.71 | 8.75 | 13.71 | 11.35 | 32.67 | 0.07 | 0.1 | 0.01 | 0 | 0.02 | 0.13 | 5.48 | 0.57 | 3.24 |
| CuPb2 Concentrate |  | 3.59 | 13.5 | 2.03 | 6.32 | 16.6 | 15.86 | 21.92 | 0.07 | 0.08 | 0.01 | 0 | 0.05 | 0.05 | 3.85 | 0.37 | 2.33 |
| CuPb1 Concentrate |  | 14.8 | 8.77 | 4.18 | 3.29 | 22.37 | 22.58 | 11.81 | 0.05 | 0.05 | 0.01 | 0.01 | 0.08 | 0.06 | 1.88 | 0.17 | 1.24 |
| tailing |  | 0.04 | 0.14 | 0.04 | 7.77 | 5.191 | 1.34 | 50.61 | 0.02 | 0.13 |  |  |  | 0.27 | 7.66 | 0.96 | 6.17 |