### Table S3. Stable Hg isotope data for high-discrepancy (ID 1-8) and low-discrepancy (ID 9-16) samples.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ID | δ199Hg (‰) | sd (‰) | δ200Hg (‰) | sd (‰) | δ201Hg(‰) | sd (‰) | δ202Hg(‰) | sd (‰) | Δ199Hg(‰) | sd (‰) | Δ200Hg (‰) | sd (‰) | Δ201Hg (‰) | sd (‰) |
| TORT-2 | 0.78 | 0.04 | 0.06 | 0.02 | 0.63 | 0.04 | 0.05 | 0.02 | 0.77 | 0.03 | 0.03 | 0.04 | 0.59 | 0.05 |
| ERM-DB001 | 1.63 | 0.03 | 1.07 | 0.01 | 2.48 | 0.01 | 2.09 | 0.03 | 1.14 | 0.04 | 0.02 | 0.02 | 0.91 | 0.03 |
| UM-Almadén | -0.17 | 0.04 | -0.27 | 0.05 | -0.44 | 0.06 | -0.52 | 0.04 | -0.04 | 0.03 | -0.01 | 0.03 | -0.05 | 0.03 |
| 1 | 0.43 | 0.07 | 0.34 | 0.03 | 0.75 | 0.05 | 0.73 | 0.02 | 0.25 | 0.08 | -0.02 | 0.04 | 0.2 | 0.07 |
| 2 | 1.26 | 0.01 | 0.79 | 0.03 | 1.9 | 0.02 | 1.45 | 0.03 | 0.89 | 0.01 | 0.06 | 0.05 | 0.81 | 0.05 |
| 3\* | 1.56 | 0.01 | 0.63 | 0.03 | 1.74 | 0.02 | 1.12 | 0.03 | 1.28 | 0.01 | 0.06 | 0.05 | 0.9 | 0.05 |
| 4\* | 2.05 | 0.04 | 1.27 | 0.04 | 3.04 | 0.05 | 2.58 | 0.05 | 1.4 | 0.04 | -0.03 | 0.05 | 1.09 | 0.03 |
| 5\* | 1.91 | 0.01 | 1.27 | 0.01 | 2.94 | 0.01 | 2.46 | 0.01 | 1.28 | 0.01 | 0.03 | 0 | 1.09 | 0.02 |
| 6 | 1.5 | 0.01 | 0.68 | 0.01 | 2.02 | 0.01 | 1.36 | 0.01 | 1.16 | 0.01 | 0 | 0 | 1 | 0.02 |
| 7\* | 1.45 | 0.02 | 0.96 | 0 | 2.18 | 0.04 | 1.86 | 0.01 | 0.98 | 0.02 | 0.03 | 0.01 | 0.78 | 0.04 |
| 8 | 1.69 | 0.02 | 1.35 | 0 | 2.68 | 0.04 | 2.54 | 0.01 | 1.05 | 0.02 | 0.08 | 0.01 | 0.78 | 0.04 |
| 9 | 3.87 | 0.04 | 1.62 | 0.02 | 4.63 | 0.04 | 3.14 | 0.02 | 3.08 | 0.03 | 0.05 | 0.04 | 2.27 | 0.05 |
| 10 | 3.53 | 0.04 | 0.61 | 0.02 | 3.32 | 0.04 | 1.13 | 0.02 | 3.25 | 0.03 | 0.04 | 0.04 | 2.48 | 0.05 |
| 11 | 3.13 | 0.04 | 1.54 | 0.02 | 4.26 | 0.04 | 2.98 | 0.02 | 2.38 | 0.03 | 0.05 | 0.04 | 2.02 | 0.05 |
| 12 | 3.79 | 0.04 | 1.42 | 0.02 | 4.32 | 0.04 | 2.63 | 0.02 | 3.12 | 0.03 | 0.09 | 0.04 | 2.34 | 0.05 |
| 13 | 1.46 | 0.04 | 1.11 | 0.02 | 2.48 | 0.04 | 2.23 | 0.02 | 0.89 | 0.03 | -0.02 | 0.04 | 0.8 | 0.05 |
| 14 | 5.91 | 0.04 | 1.04 | 0.02 | 5.49 | 0.04 | 1.72 | 0.02 | 5.48 | 0.03 | 0.18 | 0.04 | 4.2 | 0.05 |
| 15 | 3.02 | 0.04 | 1.16 | 0.02 | 3.76 | 0.04 | 2.26 | 0.02 | 2.45 | 0.03 | 0.02 | 0.04 | 2.07 | 0.05 |
| 16 | 4.46 | 0.04 | 1.07 | 0.02 | 4.55 | 0.04 | 2.03 | 0.02 | 3.95 | 0.03 | 0.05 | 0.04 | 3.02 | 0.05 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \*Composite sample |  |  |  |  |  |  |  |  |  |  |  |  |  |