

### **Certified Gold Reference Material (Milled Tail Composite)**

Art. ID GEO-G322-2  
Unit Powder 10g or 1 kg  
Deliverydetails No Dangerous Good /not restricted

| Text/Information                        | Analyte/Parameter | CAS number  | Concentration/Value | Unit | Method                              | Source |
|---|-------------------|-------------|---------------------|------|-------------------------------------|--------|
| Certified value                         | Gold (Au)         | [7440-57-5] | 0,65 ± 0,004        | ppm  | Fire Assay                          |        |
| Certified value                         | Gold (Au)         | [7440-57-5] | 0,64 ± 0,012        | ppm  | Aqua Regia                          |        |
| Single analysis only -<br>Not certified | Antimony (Sb)     | [7440-36-0] | <0,00002            | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Arsenic (As)      | [7440-38-2] | <0,00005            | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Barium (Ba)       | [7440-39-3] | 0,036               | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Bromine (Br)      | [7726-95-6] | <0,0002             | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Cadmium (Cd)      | [7440-43-9] | <0,001              | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Cerium (Ce)       | [7440-45-1] | 0,0032              | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Caesium (Cs)      | [7440-46-2] | <0,0002             | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Chromium (Cr)     | [7440-47-3] | 0,0109              | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Cobalt (Co)       | [7440-48-4] | 0,0025              | %    | Neutron ac<br>tivation a<br>nalyzes |        |
| Single analysis only -<br>Not certified | Europium (Eu)     | [7440-53-1] | 0,00015             | %    | Neutron ac<br>tivation a            |        |

|   |                 |             |           |   |                                     |
|---|-----------------|-------------|-----------|---|-------------------------------------|
| Single analysis only -<br>Not certified | Gold (Au)       | [7440-57-5] | 0,000067  | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Hafnium (Hf)    | [7440-58-6] | <0,0005   | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Iridium (Ir)    | [7439-88-5] | <0,000005 | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Iron (Fe)       | [7439-89-6] | 5,8       | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Lanthanum (La)  | [7439-91-0] | 0,0019    | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Lutetium (Lu)   | [7439-94-3] | 0,00004   | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Molybdenum (Mo) | [7439-98-7] | <0,001    | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Nickel (Ni)     | [7440-02-0] | 0,0029    | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Rubidium (Rb)   | [7440-17-7] | 0,0078    | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Samarium (Sm)   | [7440-19-9] | 0,00048   | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Scandium (Sc)   | [7440-20-2] | 0,00211   | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Selenium (Se)   | [7782-49-2] | <0,001    | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -                  | Sodium (Na)     | [7440-23-5] | 2,26      | % | Neutron ac                          |

|   |                |              |         |   |  |                                     |
|---|----------------|--------------|---------|---|--|-------------------------------------|
| Not certified                           |                |              |         |   |  | tivation a<br>nalyzes               |
| Single analysis only -<br>Not certified | Tantalum (Ta)  | [7440-25-7]  | <0,0002 | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Tellurium (Te) | [13494-80-9] | <0,002  | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Terbium (Tb)   | [7440-27-9]  | 0,0001  | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Thorium (Th)   | [7440-29-1]  | 0,00112 | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Tin (Sn)       | [7440-31-5]  | <0,02   | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Tungsten (W)   | [7440-33-7]  | <0,0002 | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Uranium (U)    | [7440-61-1]  | 0,0006  | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Ytterbium (Yb) | [7440-64-4]  | 0,00029 | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Zinc (Zn)      | [7440-66-6]  | <0,02   | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Zirconium (Zr) | [7440-67-7]  | <0,05   | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Calcium        | [7440-70-2]  | nr      | % |  | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Potassium (K)  | [7440-09-7]  | nr      | % |  | Neutron ac<br>tivation a<br>nalyzes |

|   |  |             |        |   |                                     |
|---|--|-------------|--------|---|-------------------------------------|
| Single analysis only -<br>Not certified | Silver (Ag)                            | [7440-22-4] | 0,0007 | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Mercury (Hg)                           | [7439-97-6] | nr     | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Neodymium (Nd)                         | [7440-00-8] | nr     | % | Neutron ac<br>tivation a<br>nalyzes |
| Single analysis only -<br>Not certified | Strontium (Sr)                         | [7440-24-6] | nr     | % | Neutron ac<br>tivation a<br>nalyzes |
| Indicative value                        | Iron (Fe)                              | [7439-89-6] | 5,92   | % | Fusion / X<br>RF                    |
| Indicative value                        | SiO <sub>2</sub>                       |             | 60,18  | % | Fusion / X<br>RF                    |
| Indicative value                        | Al <sub>2</sub> O <sub>3</sub>         |             | 14,13  | % | Fusion / X<br>RF                    |
| Indicative value                        | TiO <sub>2</sub>                       |             | 1,25   | % | Fusion / X<br>RF                    |
| Indicative value                        | MnO                                    |             | 0,12   | % | Fusion / X<br>RF                    |
| Indicative value                        | CaO                                    |             | 6,3    | % | Fusion / X<br>RF                    |
| Indicative value                        | Phosphorus (P)                         | [7723-14-0] | 0,062  | % | Fusion / X<br>RF                    |
| Indicative value                        | Sulfur (S)                             | [7704-34-9] | 0,04   | % | Fusion / X<br>RF                    |
| Indicative value                        | MgO                                    | [1309-48-4] | 4,04   | % | Fusion / X<br>RF                    |
| Indicative value                        | K <sub>2</sub> O                       |             | 1,7    | % | Fusion / X<br>RF                    |
| Indicative value                        | Na <sub>2</sub> O                      |             | 3,16   | % | Fusion / X<br>RF                    |
| Indicative value                        | Loss on Ignition (L.O.I<br>) (1000 °C) |             | 0,42   | % | Fusion / X<br>RF                    |