# GEOSTATS PTY LTD <br> Mining Industry Consultants <br> Reference Material Manufacture and Sales 

## Certified Gold Reference Material Product Code

G923-6

## Certified Control Values

| $5 \mathbf{0}$ gram Fire Assay |  |
| :--- | ---: |
| Gold Grade | 0.98 ppm |
| Standard Deviation | 0.05 ppm |
| Confidence Interval | $+/-0.007 \mathrm{ppm}$ |

Aqua Regia Digest
Gold Grade $\quad 0.93 \mathrm{ppm}$
Standard Deviation $\quad 0.07 \mathrm{ppm}$
Confidence Interval +/- 0.021 ppm


## CRM Details

## Control Statistic Details

Control statistics were produced from results accumulated in the October-2023 round robin. A total of 162 fire assay results and 54 results from an aqua regia technique were used to certify this material.

## Material Description

This material is described as a Copper sulphide ore.

## Colour Designation (ISCC-NBS, SP440)

This material is medium light gray in colour.

## Usage

This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.

## Preparation and Packaging

All CRMs are dried in an oven for a minimum of 12 hours at $110^{\circ} \mathrm{C}$. The dry material is then pulverised to better than 75 micron (nominal mean of 45 micron) using an air classifier. The material is then homogenised and stored in a sealed, stable container ready for final packaging.

Materials are statistically sampled from stores, then packaged into either heat sealed, air tight, plastic pulp packets or screw top sealed plastic containers ready for distribution. All packaging has been chosen to ensure minimal contamination from outside sources during shipment, use and storage.

## Assay Testwork

All standards are tested thoroughly in the Geostats bi-annual laboratory survey. This involves assaying by multiple laboratories from around the world. Results are compiled into a comprehensive report detailing statistics for each standard. Assay distributions are checked and processed statistically, producing monitoring statistics for these standards. Materials are tested regularly to ensure stability and homogeneity.

## Stability

This product remains stable in its original packaging, away from direct sunlight.

## Material Safety

This product is not hazardous and non-toxic

| Neutron Activation Analysis Results (ppm, unless otherwise noted) |  | Major Elements by <br> Fusion / XRF (\%) |  |
| :---: | :---: | :---: | :---: |
| Antimony | 1.8 | Fe | 5.8 |
| Arsenic | 54 | $\mathrm{SiO}_{2}$ | 59.47 |
| Barium | 337 | $\mathrm{Al2O}_{3}$ | 13.66 |
| Bromine | <2 | $\mathrm{TiO}_{2}$ | 1.2 |
| Cadmium | <10 | MnO | 0.11 |
| Caesium | 2 | CaO | 5.85 |
| Calcium (\%) | nr | P | 0.063 |
| Cerium | 38 | S | 0.886 |
| Chromium | 101 | MgO | 3.06 |
| Cobalt | 102 | $\mathrm{K}_{2} \mathrm{O}$ | 1.89 |
| Europium | 1.1 | Na 2 O | 3.116 |
| Gold (ppb) | 965 | LOI1000 | 0.83 |
| Hafnium | <5 |  |  |
| Iridium (ppb) | <50 | Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes. |  |
| Iron (\%) | 6.6 |  |  |
| Lanthanum | 21 |  |  |
| Lutetium | 0.4 |  |  |
| Mercury | nr |  |  |
| Molybdenum | 11 |  |  |
| Neodymium | nr |  |  |
| Nickel | <100 |  |  |
| Potassium (\%) | nr |  |  |
| Rubidium | 92 | 'nr': Not Reported |  |
| Samarium | 4.8 |  |  |
| Scandium | 20.1 |  |  |
| Selenium | <10 |  |  |
| Silver | <5 |  |  |
| Sodium (\%) | 2.32 |  |  |
| Strontium | nr |  |  |
| Tantalum | <2 |  |  |
| Tellurium | <20 |  |  |
| Terbium | 1 |  |  |
| Thorium | 11.9 |  |  |
| Tin | <200 |  |  |
| Tungsten | 4 |  |  |
| Uranium | 6 |  |  |
| Ytterbium | 2.8 |  |  |
| Zinc | 564 |  |  |
| Zirconium | <500 |  |  |

