

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

## Certified Gold Reference Material Product Code

# G999-8

## Certified Control Values

### 50 gram Fire Assay

Gold Grade 3.42 ppm  
Standard Deviation 0.19 ppm  
Confidence Interval +/- 0.039 ppm

### Aqua Regia Digest

Gold Grade 3.34 ppm  
Standard Deviation 0.20 ppm  
Confidence Interval +/- 0.055 ppm



## CRM Details

| <u>Control Statistic Details</u>                                                                                                                                                                                                                                                                                                                                                                                                       |  | <u>Neutron Activation Analysis Results (ppm, unless otherwise noted)</u> |      | <u>Major Elements by Fusion / XRF (%)</u>                                                                                                                                          |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Control statistics were produced from results accumulated in the October-1999 round robin. A total of 94 fire assay results and 55 results from an aqua regia technique were used to certify this material.                                                                                                                                                                                                                            |  | Antimony                                                                 | <0.2 | Fe                                                                                                                                                                                 | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Arsenic                                                                  | <1   | SiO <sub>2</sub>                                                                                                                                                                   | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Barium                                                                   | 163  | Al <sub>2</sub> O <sub>3</sub>                                                                                                                                                     | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Bromine                                                                  | <1   | TiO <sub>2</sub>                                                                                                                                                                   | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Cadmium                                                                  | nr   | MnO                                                                                                                                                                                | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Caesium                                                                  | 1.14 | CaO                                                                                                                                                                                | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Calcium (%)                                                              | 6.88 | P                                                                                                                                                                                  | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Cerium                                                                   | 28.3 | S                                                                                                                                                                                  | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Chromium                                                                 | 187  | MgO                                                                                                                                                                                | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Cobalt                                                                   | 38   | K <sub>2</sub> O                                                                                                                                                                   | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Europium                                                                 | 1.51 | Na <sub>2</sub> O                                                                                                                                                                  | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Gold (ppb)                                                               | 3320 | LOI1000                                                                                                                                                                            | nr |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Hafnium                                                                  | 3.97 | Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.<br><br>'nr': Not Reported |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Iridium (ppb)                                                            | <20  |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Iron (%)                                                                 | 8.17 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Lanthanum                                                                | 9.53 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Lutetium                                                                 | 0.42 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Mercury                                                                  | nr   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Molybdenum                                                               | <5   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Neodymium                                                                | nr   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Nickel                                                                   | nr   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Potassium (%)                                                            | <0.2 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Rubidium                                                                 | <20  |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Samarium                                                                 | 5.09 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Scandium                                                                 | 32.4 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Selenium                                                                 | <5   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Silver                                                                   | <5   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Sodium (%)                                                               | 2.07 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Strontium                                                                | nr   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Tantalum                                                                 | <1   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Tellurium                                                                | <5   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Terbium                                                                  | nr   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Thorium                                                                  | 1.14 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Tin                                                                      | nr   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Tungsten                                                                 | <2   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Uranium                                                                  | <2   |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Ytterbium                                                                | 2.97 |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Zinc                                                                     | 171  |                                                                                                                                                                                    |    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                        |  | Zirconium                                                                | <500 |                                                                                                                                                                                    |    |
| <u>Material Description</u>                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                          |      |                                                                                                                                                                                    |    |
| This material is described as a Fresh Basic Ore ex Kalgoorlie Region.                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                          |      |                                                                                                                                                                                    |    |
| <u>Colour Designation (ISCC-NBS, SP440)</u>                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                          |      |                                                                                                                                                                                    |    |
| This material is light gray in colour.                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                          |      |                                                                                                                                                                                    |    |
| <u>Usage</u>                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                          |      |                                                                                                                                                                                    |    |
| This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.                                                                                                                                                                                                                                                                                                 |  |                                                                          |      |                                                                                                                                                                                    |    |
| <u>Preparation and Packaging</u>                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                          |      |                                                                                                                                                                                    |    |
| All CRMs are dried in an oven for a minimum of 12 hours at 110°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.                                                                                                                            |  |                                                                          |      |                                                                                                                                                                                    |    |
| <u>Assay Testwork</u>                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                          |      |                                                                                                                                                                                    |    |
| 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. |  |                                                                          |      |                                                                                                                                                                                    |    |
| <u>Stability</u>                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                                                                          |      |                                                                                                                                                                                    |    |
| This product remains stable in its original packaging, away from direct sunlight.                                                                                                                                                                                                                                                                                                                                                      |  |                                                                          |      |                                                                                                                                                                                    |    |
| <u>Material Safety</u>                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                                                                          |      |                                                                                                                                                                                    |    |
| This product is not hazardous and non-toxic.                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                                          |      |                                                                                                                                                                                    |    |

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Geostats Pty Ltd, Certified Gold Reference Material, Product Code: