

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

## Certified Gold Reference Material Product Code

# G921-4

## Certified Control Values

### 50 gram Fire Assay

Gold Grade 0.44 ppm  
Standard Deviation 0.02 ppm  
Confidence Interval +/- 0.003 ppm

### Aqua Regia Digest

Gold Grade 0.43 ppm  
Standard Deviation 0.03 ppm  
Confidence Interval +/- 0.009 ppm



## CRM Details

### Control Statistic Details

Control statistics were produced from results accumulated in the October-2021 round robin. A total of 171 fire assay results and 57 results from an aqua regia technique were used to certify this material.

### Material Description

This material is described as a Gold cut-off grade composite.

### Colour Designation (ISCC-NBS, SP440)

This material is 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°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)

Antimony	<0.2
Arsenic	<0.5
Barium	318
Bromine	<2
Cadmium	<10
Caesium	2
Calcium (%)	nr
Cerium	38
Chromium	103
Cobalt	22
Europium	1.3
Gold (ppb)	421
Hafnium	<5
Iridium (ppb)	<50
Iron (%)	5.4
Lanthanum	20
Lutetium	0.4
Mercury	nr
Molybdenum	<10
Neodymium	nr
Nickel	29
Potassium (%)	nr
Rubidium	96
Samarium	4.6
Scandium	18.9
Selenium	<10
Silver	<5
Sodium (%)	2.44
Strontium	nr
Tantalum	2
Tellurium	<20
Terbium	1
Thorium	12.7
Tin	<200
Tungsten	<2
Uranium	7
Ytterbium	2.8
Zinc	<200
Zirconium	<500

### Major Elements by Fusion / XRF (%)

Fe	5.17
SiO <sub>2</sub>	62.31
Al <sub>2</sub> O <sub>3</sub>	14.18
TiO <sub>2</sub>	1.07
MnO	0.11
CaO	5.71
P	0.054
S	0.04
MgO	3.22
K <sub>2</sub> O	2.07
Na <sub>2</sub> O	3.32
LOI1000	0.36

Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.

'nr': Not Reported