

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

## Certified Gold Reference Material Product Code

# G322-8

## Certified Control Values

### 50 gram Fire Assay

Gold Grade 1.10 ppm  
Standard Deviation 0.05 ppm  
Confidence Interval +/- 0.006 ppm

### Aqua Regia Digest

Gold Grade 1.07 ppm  
Standard Deviation 0.05 ppm  
Confidence Interval +/- 0.011 ppm



## CRM Details

### Control Statistic Details

Control statistics were produced from results accumulated in the April-2022, April-2008 round robins. A total of 271 fire assay results and 87 results from an aqua regia technique were used to certify this material.

### Material Description

This material is described as a Head composite.

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

This material is light brownish 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	0.8
Arsenic	1.3
Barium	1710
Bromine	<2
Cadmium	<10
Caesium	2
Calcium (%)	nr
Cerium	154
Chromium	43
Cobalt	24
Europium	2.5
Gold (ppb)	1150
Hafnium	8
Iridium (ppb)	<50
Iron (%)	6.8
Lanthanum	84
Lutetium	0.7
Mercury	nr
Molybdenum	<10
Neodymium	nr
Nickel	32
Potassium (%)	nr
Rubidium	78
Samarium	12.1
Scandium	19
Selenium	<10
Silver	9
Sodium (%)	2.53
Strontium	nr
Tantalum	<2
Tellurium	<20
Terbium	2
Thorium	27.1
Tin	<200
Tungsten	<2
Uranium	4
Ytterbium	4.6
Zinc	<200
Zirconium	<500

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

Fe	6.23
SiO <sub>2</sub>	59.59
Al <sub>2</sub> O <sub>3</sub>	14.51
TiO <sub>2</sub>	1.25
MnO	0.12
CaO	5.06
P	0.12
S	0.12
MgO	2.84
K <sub>2</sub> O	2.97
Na <sub>2</sub> O	3.36
LOI1000	0.86

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

'nr': Not Reported