

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

## Certified Multi-Element Reference Material Product Code

# GBMS911-1

### Certified Control Values

#### Analyses

Element	Grade	Standard Deviation	No of Analyses	Confidence Interval
Au - FA (ppm)	1.04	0.11	141	+/- 0.018
Au - AR (ppm)	1.04	0.16	66	+/- 0.04
Silver (ppm)	11.9	1.0	286	+/- 0.12
Copper (ppm)	10034	399	283	+/- 46.8
Lead (ppm)	5846	389	266	+/- 47
Zinc (ppm)	1219	75	290	+/- 8.6
Nickel (ppm)	23	4	242	+/- 0.5
Arsenic (ppm)	337	52	247	+/- 6.5
Cobalt (ppm)	31	4	248	+/- 0.5
Sulphur (%)	1.40	0.07	231	+/- 0.009

#### CRM Details

##### Control Statistic Details

Control statistics were produced from results accumulated in the :  
October-2012 Geostats Pty Ltd Laboratory Round Robin Program.  
66 laboratories (at least) tested this material for base metal content.

##### Source Material

Prior to homogenisation and testing, this material was sourced from  
Cu / Au ore low sulphide

##### Colour Designation

Medium Light Gray

##### Usage

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

##### Preparation and Packaging

All standards are dried in an oven for a minimum of 12 hours at 110C. 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 a minimum of 50 reputable laboratories selected from across the world using a  
variety of methods (including FA, AR, 3AD, 4AD and ICP, AAS and XRF). 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.

##### Neutron Activation

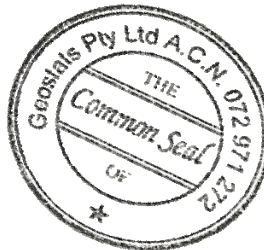
##### Analysis Results (ppm)

Antimony	345
Arsenic	355
Barium	530
Bromine	<0.5
Cadmium	<10
Cerium	50
Caesium	2
Chromium	23
Cobalt	35
Europium	1
Gold ppb	905
Hafnium	12
Iridium ppb	<20
Iron %	5
Lanthanum	28
Lutetium	0
Molybendum	34
Nickel	29
Rubidium	140
Samarium	5
Scandium	13
Selenium	<5
Sodium %	3
Tantalum	2
Tellurium	<10
Terbium	1
Thorium	19
Tin	<200
Tungsten	<2
Uranium	10
Ytterbium	3
Zinc	1275
Zirconium	<500
Calcium%	nr
Potassium %	nr
Silver	12
Mercury	nr
Neodymium	nr
Strontium	nr

##### Major Elements

##### Fusion / XRF (%)

Fe	5.12
SiO2	63.51
Al2O3	13.455
TiO2	0.8865
MnO	0.07
CaO	3.34
P	0.0535
S	1.42
MgO	1.595
K2O	2.91
Na2O	3.5305
LOI1000	1.315



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