

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

## Certified Ore Grade Base Metal Reference Material Product Code

# GBM909-15

### Certified Control Values

#### Ore Grade Base Metal Analyses

Element	Grade	Standard Deviation	No of Analyses	Confidence Interval
Nickel (ppm)	115901	5301	116	+/- 979
Copper (ppm)	13120	425	152	+/- 68
Zinc (ppm)	26608	1283	148	+/- 209
Lead (ppm)	2120	131	142	+/- 22
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	13.5	1.2	99	+/- 0.24
Sulphur (%)	26.7	0.9	118	+/- 0.17

### CRM Details

#### Control Statistic Details

Control statistics were produced from results accumulated in the :

April-2011 Geostats Pty Ltd Laboratory Round Robin Program.  
99 laboratories (at least) tested this material for base metal content.

#### Source Material

Prior to homogenisation and testing, this material was sourced from Nickel Sulphide Concentrate

#### Colour Designation

Olive 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

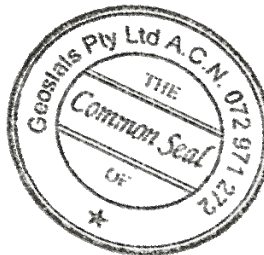
All standards are dried in an oven for a minimum of 12 hours at 110C. The dry material is then pulverised to better than 75 micron (nominal mean of 45 micron) using an Air Classifier. The material is then homogenised and stored in a sealed, stable container ready for final packaging.

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 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)		Major Elements Fusion / XRF (%)	
Antimony	4.05	Fe	29.72
Arsenic	65.9	SiO <sub>2</sub>	9.73
Barium	#DIV/0!	Al <sub>2</sub> O <sub>3</sub>	0.91
Bromine	2	TiO <sub>2</sub>	0.11
Cadmium	69	MnO	0.04
Cerium	<2.17	CaO	0.71
Caesium	2.495	P	0.008
Chromium	276.5	S	26.6
Cobalt	2840	MgO	4.2
Europium	<1	K <sub>2</sub> O	0.089
Gold ppb	115.15	Na <sub>2</sub> O	0.1348
Hafnium	<0.646	LOI1000	21.5
Iridium ppb	128		
Iron %	28.5		
Lanthanum	2.335		
Lutetium	0.2		
Molybdenum	39		
Nickel	117000		
Rubidium	<33.2		
Samarium	0.4145		
Scandium	1.98		
Selenium	10.495		
Sodium %	0.09635		
Tantalum	<1.04		
Tellurium	<5		
Terbium	<0.934		
Thorium	0.964		
Tin	<500		
Tungsten	<2		
Uranium	0.7		
Ytterbium	<1		
Zinc	26800		
Zirconium	<400		
Calcium%	nr		
Potassium %	nr		
Silver	13		
Mercury	nr		
Neodymium	nr		
Strontium	nr		



10A Marsh Close, O'Connor, Western Australia 6163  
Phone : +61 8 9314 2566, Fax : +61 8 9314 3699  
e-mail : pjh@geostats.com.au, srr@geostats.com.au  
Website <http://www.geostats.com.au>

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