

GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Base Metal Reference Material Product Code

GBM309-1

Certified Control Values

Base Metal Analyses

Element	Grade	Standard Deviation	No of Analyses	Confidence Interval
Nickel (ppm)	23	9	73	+/- 2.1
Copper (ppm)	1554	104	81	+/- 23.1
Zinc (ppm)	5239	342	76	+/- 78.6
Lead (ppm)	92	14	78	+/- 3.1
Arsenic (ppm)	95	9	63	+/- 2.2
Cobalt (ppm)	22	8	71	+/- 2
Silver (ppm)	6.0	0.5	73	+/- 0.1

CRM Details

Control Statistic Details

Control statistics were produced from results accumulated in the :
April-2009 Geostats Pty Ltd Laboratory Round Robin Program.
63 laboratories (at least) tested this material for base metal content.

Source Material

Prior to homogenisation and testing, this material was sourced from
Cu Pb Zn Ag sub ore

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.

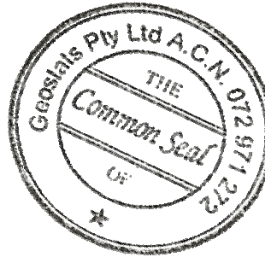
Preparation and Packaging

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 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	1.4	Fe	nr
Arsenic	101	SiO2	nr
Barium	370	Al2O3	nr
Bromine	<1	TiO2	nr
Cadmium	14	MnO	nr
Cerium	39	CaO	nr
Caesium	2	P	nr
Chromium	140	S	nr
Cobalt	28	MgO	nr
Europium	1.2	K2O	nr
Gold ppb	57	Na2O	nr
Hafnium	8	LOI1000	nr
Iridium ppb	<20		
Iron %	6		
Lanthanum	20		
Lutetium	0.4		
Molybdenum	<1.8		
Nickel	25		
Rubidium	93		
Samarium	4.6		
Scandium	22.7		
Selenium	<1		
Sodium %	2.5		
Tantalum	5.1		
Tellurium	<10		
Terbium	0.6		
Thorium	13		
Tin	<150		
Tungsten	10		
Uranium	5.6		
Ytterbium	2.7		
Zinc	5300		
Zirconium	170		
Calcium%	nr		
Potassium %	nr		
Silver	4.8		
Mercury	nr		
Neodymium	nr		
Strontium	nr		

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