

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

## GBM995-1

Certified Control Values



GBM995-1

Geostats Pty Ltd, Certified Geochem Base Metal Reference Material, Product Code:

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	26	6	87	+/- 1.2
Copper (ppm)	4155	222	116	+/- 41
Zinc (ppm)	23	7	104	+/- 1.3
Lead (ppm)	249	25	109	+/- 4.8
Arsenic (ppm)	145	20	90	+/- 4.2
Cobalt (ppm)	119	7	46	+/- 2
Silver (ppm)	1.6	0.5	89	+/- 0.1

### CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the October-1995 & April-2008 round robins. The number of results used to certify each analyte is shown in the table above.	<u>Neutron Activation Analysis Results (ppm, unless otherwise noted)</u>		<u>Major Elements by Fusion / XRF (%)</u>	
	<u>Material Description</u> This material is described as a Pilbara Sulphides.	Antimony	0.26	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is light brownish gray in colour.	Arsenic	148.5	SiO <sub>2</sub>	nr
<u>Usage</u> This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Barium	103.5	Al <sub>2</sub> O <sub>3</sub>	nr
<u>Preparation and Packaging</u> 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.	Bromine	2.125	TiO <sub>2</sub>	nr
<u>Assay Testwork</u> 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.	Cadmium	<5	MnO	nr
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	0.975	CaO	nr
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	nr
	Cerium	93.5	S	nr
	Chromium	340.5	MgO	nr
	Cobalt	127	K <sub>2</sub> O	nr
	Europium	<1	Na <sub>2</sub> O	nr
	Gold (ppb)	2685	LOI1000	nr
	Hafnium	5.53		
	Iridium (ppb)	<50		
	Iron (%)	1.865		
	Lanthanum	53.25		
	Lutetium	0.615		
	Mercury	nr		
	Molybdenum	<1		
	Neodymium	nr		
	Nickel	26		
	Potassium (%)	3.7		
	Rubidium	524.5		
	Samarium	7.57		
	Scandium	8.085		
	Selenium	<5		
	Silver	1		
	Sodium (%)	1.71		
	Strontium	nr		
	Tantalum	0.7		
	Tellurium	<10		
	Terbium	0.8		
	Thorium	9.265		
	Tin	<100		
	Tungsten	9.97		
	Uranium	3.015		
	Ytterbium	4.29		
	Zinc	40		
	Zirconium	<200		

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