

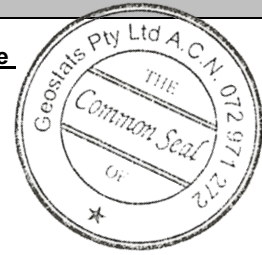
# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

## GBM304-13

Certified Control Values



GBM304-13

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	21	10	32	+/- 4
Copper (ppm)	97125	3310	77	+/- 756
Zinc (ppm)	59274	2603	86	+/- 561
Lead (ppm)	235648	7889	71	+/- 1881
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	nr	nr	nr	nr
Sulphur (%)	nr	nr	nr	nr

### CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the April-2004 & October-2005 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 Lead / Zinc Middlings Material (Sulphide).	Antimony	2660	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is medium dark gray in colour.	Arsenic	850	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	<150	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	<190	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	<300	MnO	nr
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	<0.5	CaO	nr
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	nr
	Cerium	<14	S	nr
	Chromium	<42	MgO	nr
	Cobalt	280	K <sub>2</sub> O	nr
	Europium	<2	Na <sub>2</sub> O	nr
	Gold (ppb)	20000	LOI1000	nr
	Hafnium	<1		
	Iridium (ppb)	<100		
	Iron (%)	20.7		
	Lanthanum	697		
	Lutetium	0.5		
	Mercury	nr		
	Molybdenum	57		
	Neodymium	nr		
	Nickel	<50		
	Potassium (%)	nr		
	Rubidium	<22		
	Samarium	1.8		
	Scandium	<0.2		
	Selenium	60		
	Silver	1800		
	Sodium (%)	<5		
	Strontium	nr		
	Tantalum	<0.5		
	Tellurium	<67		
	Terbium	<0.5		
	Thorium	<0.7		
	Tin	<230		
	Tungsten	<23000		
	Uranium	<11		
	Ytterbium	<9		
	Zinc	54000		
	Zirconium	<450		

20 Hines Road, 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>