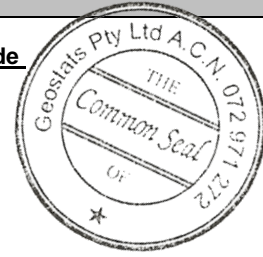


# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

**Certified Ore Grade Base Metal Reference Material Product Code**

## GBM315-16



### Certified Control Values

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	11	nr	nr	nr
Copper (ppm)	582	45	120	+/- 8
Zinc (ppm)	59724	1983	113	+/- 371
Lead (ppm)	188046	6869	92	+/- 1430
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	577.4	24.3	107	+/- 4.68
Sulphur (%)	8.40	0.29	98	+/- 0.06

### CRM Details

Control Statistic Details	Neutron Activation Analysis Results (ppm, unless otherwise noted)		Major Elements by Fusion / XRF (%)	
	Control statistics were produced from results accumulated in the April-2015 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	411	Fe
<b>Material Description</b> This material is described as a Pb Zn Ag ore Composite.	Arsenic	8430	SiO <sub>2</sub>	22.56
	Barium	<50	Al <sub>2</sub> O <sub>3</sub>	0.97
<b>Colour Designation (ISCC-NBS, SP440)</b> This material is medium light gray in colour.	Bromine	<1	TiO <sub>2</sub>	0.04
	Cadmium	200	MnO	4.41
<b>Usage</b> This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Caesium	<0.5	CaO	5.9
	Calcium (%)	nr	P	0.112
<b>Preparation and Packaging</b> 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.	Cerium	170	S	8.09
	Chromium	<20	MgO	0.81
<b>Assay Testwork</b> 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.	Cobalt	31	K <sub>2</sub> O	0.152
	Europium	13.4	Na <sub>2</sub> O	0.15
<b>Stability</b> This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	267	LOI1000	1.07
	Hafnium	<2	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
<b>Material Safety</b> This product is not hazardous and non-toxic.	Iridium (ppb)	<50	nr: Not Reported	
	Iron (%)	21.6		
	Lanthanum	140		
	Lutetium	0.6		
	Mercury	nr		
	Molybdenum	<2		
	Neodymium	nr		
	Nickel	<20		
	Potassium (%)	nr		
	Rubidium	<10		
	Samarium	10.7		
	Scandium	<0.5		
	Selenium	<10		
	Silver	550		
	Sodium (%)	<0.2		
	Strontium	nr		
	Tantalum	<0.3		
	Tellurium	nr		
	Terbium	<0.5		
	Thorium	<0.5		
	Tin	nr		
	Tungsten	<10		
	Uranium	1.3		
	Ytterbium	4		
	Zinc	62000		
	Zirconium	nr		

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