

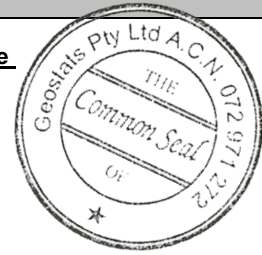
# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

## GBM910-13

Certified Control Values



GBM910-13

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	26969	1181	131	+/- 205
Copper (ppm)	2306	124	43	+/- 39
Zinc (ppm)	152	40	32	+/- 15
Lead (ppm)	34	nr	nr	nr
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	1.9	nr	nr	nr
Sulphur (%)	8.24	0.32	121	+/- 0.06

### CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the October-2010 & April-2011 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 Nickel Sulphide ore.	Antimony	1.445	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is medium light gray in colour.	Arsenic	241	SiO <sub>2</sub>	31.235
<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	96.5	Al <sub>2</sub> O <sub>3</sub>	4.625
<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	2.45	TiO <sub>2</sub>	0.242
<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	9.45	MnO	0.15
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	1.795	CaO	6.22
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	0.013
	Cerium	<8.08	S	8.09
	Chromium	1120	MgO	14.7
	Cobalt	631	K <sub>2</sub> O	0.221
	Europium	<1	Na <sub>2</sub> O	0.777
	Gold (ppb)	117.5	LOI1000	11.335
	Hafnium	<1.06		
	Iridium (ppb)	45.95	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Iron (%)	14.95	'nr': Not Reported	
	Lanthanum	1.384		
	Lutetium	0.078		
	Mercury	nr		
	Molybdenum	<2		
	Neodymium	nr		
	Nickel	27550		
	Potassium (%)	nr		
	Rubidium	<7.31		
	Samarium	0.77		
	Scandium	14.55		
	Selenium	11.95		
	Silver	1		
	Sodium (%)	0.627		
	Strontium	nr		
	Tantalum	<0.118		
	Tellurium	<5		
	Terbium	0.19		
	Thorium	0.281		
	Tin	<100		
	Tungsten	1.63		
	Uranium	<0.287		
	Ytterbium	0.53		
	Zinc	185		
	Zirconium	<400		

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