

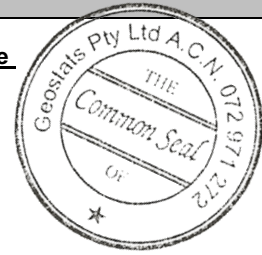
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

GBM312-16

Certified Control Values



GBM312-16

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	27907	1161	161	+/- 181
Copper (ppm)	3092	155	219	+/- 21
Zinc (ppm)	141	nr	nr	nr
Lead (ppm)	49	nr	nr	nr
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	1.8	0.5	151	+/- 0.08
Sulphur (%)	9.78	0.32	149	+/- 0.05

CRM Details

<u>Control Statistic Details</u>	<u>Neutron Activation Analysis Results (ppm, unless otherwise noted)</u>		<u>Major Elements by Fusion / XRF (%)</u>	
	Control statistics were produced from results accumulated in the April-2012 & October-2012 round robins. The number of results used to certify each analyte is shown in the table above.	Antimony	0.5	Fe
<u>Material Description</u> This material is described as a Ni Ore ex Eastern Goldfields.	Arsenic	93.75	SiO ₂	29.57
	Barium	100	Al ₂ O ₃	2.9
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is medium dark gray in colour.	Bromine	1.65	TiO ₂	0.133
	Cadmium	<5	MnO	0.13
<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.	Caesium	<0.5	CaO	5.88
	Calcium (%)	nr	P	0.01
<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.	Cerium	5	S	9.69
	Chromium	942.5	MgO	14.6
<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.	Cobalt	674.5	K ₂ O	0.263
	Europium	0.2	Na ₂ O	0.438
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	110	LOI1000	12.3
	Hafnium	0.6	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
<u>Material Safety</u> This product is not hazardous and non-toxic.	Iridium (ppb)	42.5	'nr': Not Reported	
	Iron (%)	16.55		
	Lanthanum	2		
	Lutetium	0.1		
	Mercury	nr		
	Molybdenum	<5		
	Neodymium	nr		
	Nickel	29250		
	Potassium (%)	nr		
	Rubidium	<10		
	Samarium	0.6		
	Scandium	8.45		
	Selenium	12.5		
	Silver	2		
	Sodium (%)	0.294		
	Strontium	nr		
	Tantalum	0.1		
	Tellurium	<10		
	Terbium	<0.5		
	Thorium	<0.5		
	Tin	<100		
	Tungsten	<2		
	Uranium	<0.2		
	Ytterbium	<0.5		
	Zinc	87		
	Zirconium	<200		

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