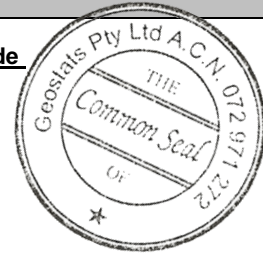


# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

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

## GBM915-14



### Certified Control Values

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	12993	469	172	+/- 71
Copper (ppm)	17377	548	246	+/- 69
Zinc (ppm)	41	13	75	+/- 3
Lead (ppm)	98	17	86	+/- 4
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	18.5	1.3	208	+/- 0.17
Sulphur (%)	2.08	0.13	186	+/- 0.02

### 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 October-2015, April-2018 round robins. The number of results used to certify each analyte is shown in the table above.	Antimony	25.7	Fe
<b>Material Description</b> This material is described as a Blend of nickel filtercake and coffee rock.	Arsenic	5580	SiO <sub>2</sub>	10.54
	Barium	<100	Al <sub>2</sub> O <sub>3</sub>	28.78
<b>Colour Designation (ISCC-NBS, SP440)</b> This material is moderate brown in colour.	Bromine	21	TiO <sub>2</sub>	1.41
	Cadmium	<20	MnO	0.11
<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	2	CaO	0.15
	Calcium (%)	nr	P	0.016
<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	19.7	S	2.127
	Chromium	128	MgO	0.13
<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	3450	K <sub>2</sub> O	0.115
	Europium	<0.5	Na <sub>2</sub> O	nr
<b>Stability</b> This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	6205	LOI1000	22.27
	Hafnium	9.5	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)	661	nr: Not Reported	
	Iron (%)	20.85		
	Lanthanum	4		
	Lutetium	<0.05		
	Mercury	nr		
	Molybdenum	<10		
	Neodymium	nr		
	Nickel	12925		
	Potassium (%)	nr		
	Rubidium	<20		
	Samarium	0.45		
	Scandium	12.85		
	Selenium	75.5		
	Silver	16		
	Sodium (%)	0.03		
	Strontium	nr		
	Tantalum	<2		
	Tellurium	57.9		
	Terbium	<1		
	Thorium	72.85		
	Tin	<200		
	Tungsten	<5		
	Uranium	8.5		
	Ytterbium	<0.5		
	Zinc	<100		
	Zirconium	<500		

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