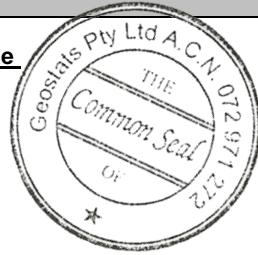


GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

GBM917-14



Certified Control Values

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	21299	651	88	+/- 139
Copper (ppm)	18759	587	118	+/- 107
Zinc (ppm)	88385	2396	97	+/- 485
Lead (ppm)	41336	1454	97	+/- 294
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	40.8	2.6	111	+/- 0.49
Sulphur (%)	14.60	0.46	86	+/- 0.1

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-2017 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	35.7	Fe
Material Description This material is described as a Nickel Ore High Grade.	Arsenic	183	SiO ₂	16.44
	Barium	<103	Al ₂ O ₃	4.48
Colour Designation (ISCC-NBS, SP440) This material is dark gray in colour.	Bromine	2	TiO ₂	0.545
	Cadmium	530	MnO	0.079
Usage 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	2.76
	Calcium (%)	nr	P	0.042
Preparation and Packaging 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	16	S	14.3
	Chromium	72	MgO	1.77
Assay Testwork 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	1090	K ₂ O	0.294
	Europium	0.6	Na ₂ O	0.75
Stability This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	658	LOI1000	17.59
	Hafnium	<5	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
Material Safety This product is not hazardous and non-toxic.	Iridium (ppb)	<50	nr: Not Reported	
	Iron (%)	22.7		
	Lanthanum	12		
	Lutetium	<0.2		
	Mercury	nr		
	Molybdenum	<10		
	Neodymium	nr		
	Nickel	20500		
	Potassium (%)	nr		
	Rubidium	<20		
	Samarium	2.2		
	Scandium	8.7		
	Selenium	16		
	Silver	41		
	Sodium (%)	0.58		
	Strontium	nr		
	Tantalum	<2		
	Tellurium	<20		
	Terbium	1		
	Thorium	2.5		
	Tin	<400		
	Tungsten	<5		
	Uranium	<1		
	Ytterbium	0.8		
	Zinc	88000		
	Zirconium	<500		

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>

GBM917-14

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