

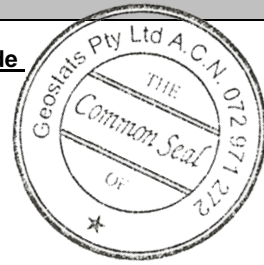
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

GBM321-14

Certified Control Values



GBM321-14

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	5120	279	80	+/- 62
Copper (ppm)	2756	112	107	+/- 22
Zinc (ppm)	206	28	90	+/- 6
Lead (ppm)	53	19	72	+/- 4
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	1.8	0.5	79	+/- 0.12
Sulphur (%)	1.78	0.06	84	+/- 0.01

CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the April-2021 round robin. 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 Composite nickel, sulphide.	Antimony	3	Fe	10
	Arsenic	611	SiO ₂	48.53
	Barium	440	Al ₂ O ₃	3.16
	Bromine	<2	TiO ₂	0.23
	Cadmium	<10	MnO	0.11
	Caesium	<2	CaO	1.98
	Calcium (%)	nr	P	0.01
	Cerium	7	S	1.754
	Chromium	8460	MgO	20.3
	Cobalt	390	K ₂ O	0.087
	Europium	<0.5	Na ₂ O	0.24
	Gold (ppb)	1350	LOI1000	6.99
	Hafnium	<5		
	Iridium (ppb)	2680	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Iron (%)	10.3	'nr': Not Reported	
	Lanthanum	3		
	Lutetium	<0.2		
	Mercury	nr		
	Molybdenum	<10		
	Neodymium	nr		
	Nickel	5400		
	Potassium (%)	nr		
	Rubidium	<20		
	Samarium	0.6		
	Scandium	12.1		
	Selenium	10		
	Silver	<5		
	Sodium (%)	0.15		
	Strontium	nr		
	Tantalum	<2		
	Tellurium	<20		
	Terbium	<1		
	Thorium	<0.306		
	Tin	<200		
	Tungsten	<2		
	Uranium	<2		
	Ytterbium	<0.5		
	Zinc	220		
	Zirconium	<500		
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is pale reddish brown in colour.				
<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.				
<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.				
<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.				
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.				
<u>Material Safety</u> This product is not hazardous and non-toxic.				

20 Hines Road, O'Connor, Western Australia 6163

Phone: +61 8 9314 2566 | Email: info@geostats.com.au

Website: www.geostats.com.au