

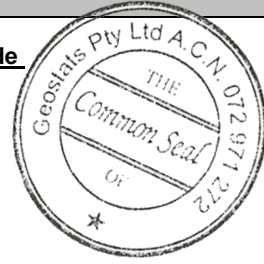
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

GBM321-12

Certified Control Values



GBM321-12

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	113	10	78	+/- 2
Copper (ppm)	11883	386	103	+/- 76
Zinc (ppm)	10128	375	94	+/- 77
Lead (ppm)	4967	195	90	+/- 41
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	26.0	2.5	105	+/- 0.48
Sulphur (%)	2.06	0.08	87	+/- 0.02

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 Gold ore minor Cu Pb Zn.	Antimony	413	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is medium gray in colour.	Arsenic	680	SiO ₂	53.59
<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	289	Al ₂ O ₃	12
<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	TiO ₂	1.69
<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	20	MnO	0.16
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	<2	CaO	5.77
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	0.081
	Cerium	42	S	1.994
	Chromium	37	MgO	2.99
	Cobalt	77	K ₂ O	1.59
	Europium	1.6	Na ₂ O	nr
	Gold (ppb)	11300	LOI1000	0.65
	Hafnium	<5	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Iridium (ppb)	<50	'nr': Not Reported	
	Iron (%)	9		
	Lanthanum	22		
	Lutetium	0.5		
	Mercury	nr		
	Molybdenum	48		
	Neodymium	nr		
	Nickel	120		
	Potassium (%)	nr		
	Rubidium	69		
	Samarium	5.6		
	Scandium	22.5		
	Selenium	12		
	Silver	27		
	Sodium (%)	1.99		
	Strontium	nr		
	Tantalum	<2		
	Tellurium	<20		
	Terbium	1		
	Thorium	9.74		
	Tin	<200		
	Tungsten	9		
	Uranium	4		
	Ytterbium	3.2		
	Zinc	10500		
	Zirconium	<500		

20 Hines Road, O'Connor, Western Australia 6163

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

Website: www.geostats.com.au