

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

## GBM323-10

Certified Control Values

### Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	2587	130	60	+/- 33.8
Copper (ppm)	1360	49	65	+/- 12.1
Zinc (ppm)	317	80	63	+/- 20.4
Lead (ppm)	272	13	59	+/- 3.4
Arsenic (ppm)	57	5	52	+/- 1.5
Cobalt (ppm)	158	21	64	+/- 5.3
Silver (ppm)	1.1	0.2	53	+/- 0.06

### Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	2396	159	55	+/- 43.5
Copper (ppm)	1343	58	75	+/- 13.4
Zinc (ppm)	141	8	51	+/- 2.2
Lead (ppm)	260	20	63	+/- 5.1
Arsenic (ppm)	55	4	55	+/- 1.1
Cobalt (ppm)	116	10	56	+/- 2.6
Silver (ppm)	1.2	0.2	59	+/- 0.06

### CRM Details

Control Statistic Details		Neutron Activation Analysis Results (ppm, unless otherwise noted)		Major Elements by Fusion / XRF (%)	
<p>Control statistics were produced from results accumulated in the April-2023 round robin. The number of results used to certify each analyte is shown in the table above.</p>		Antimony	2	Fe	8.97
		Arsenic	62	SiO <sub>2</sub>	33.65
		Barium	<100	Al <sub>2</sub> O <sub>3</sub>	5.93
		Bromine	<2	TiO <sub>2</sub>	0.2
		Cadmium	<10	MnO	0.16
		Caesium	<2	CaO	2.56
		Calcium (%)	nr	P	0.007
		Cerium	7	S	0.54
		Chromium	35700	MgO	26.4
		Cobalt	185	K <sub>2</sub> O	0.137
		Europium	<0.5	Na <sub>2</sub> O	0.162
		Gold (ppb)	1510	LOI1000	9.83
		Hafnium	<5	<p>Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.</p> <p>'nr': Not Reported</p>	
		Iridium (ppb)	96		
Iron (%)	9.37				
Lanthanum	3				
Lutetium	<0.2				
Mercury	nr				
Molybdenum	<10				
Neodymium	nr				
Nickel	2850				
Potassium (%)	nr				
Rubidium	<20				
Samarium	0.6				
Scandium	10.5				
Selenium	<10				
Silver	<5				
Sodium (%)	0.108				
Strontium	nr				
Tantalum	<2				
Tellurium	<20				
Terbium	<1				
Thorium	0.9				
Tin	<200				
Tungsten	4				
Uranium	<1				
Ytterbium	<0.5				
Zinc	390				
Zirconium	<500				
<b>Material Description</b> This material is described as a Pt Pd Au ore.					
<b>Colour Designation (ISCC-NBS, SP440)</b> This material is light olive gray in colour.					
<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.					
<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.					
<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.					
<b>Stability</b> This product remains stable in its original packaging, away from direct sunlight.					
<b>Material Safety</b> This product is not hazardous and non-toxic.					

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