

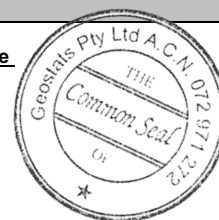
# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

## GBM313-7

Certified Control Values



GBM313-7

### Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	299	11	53	+/- 3
Copper (ppm)	2976	81	57	+/- 21.6
Zinc (ppm)	367	18	58	+/- 4.7
Lead (ppm)	103	6	53	+/- 1.8
Arsenic (ppm)	1131	42	45	+/- 12.9
Cobalt (ppm)	35	3	58	+/- 0.7
Silver (ppm)	2.4	0.3	51	+/- 0.08

### Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	293	18	48	+/- 5.2
Copper (ppm)	3019	129	65	+/- 32.2
Zinc (ppm)	359	27	58	+/- 7
Lead (ppm)	105	9	55	+/- 2.5
Arsenic (ppm)	1155	60	57	+/- 16.2
Cobalt (ppm)	36	5	48	+/- 1.5
Silver (ppm)	2.4	0.2	55	+/- 0.06

### 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 April-2013 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	15	Fe
<b>Material Description</b> This material is described as a Copper Gold ore.	Arsenic	1140	SiO <sub>2</sub>	52.29
	Barium	262	Al <sub>2</sub> O <sub>3</sub>	12.62
<b>Colour Designation (ISCC-NBS, SP440)</b> This material is pale yellowish brown in colour.	Bromine	4.26	TiO <sub>2</sub>	0.68
	Cadmium	<6.65	MnO	0.13
<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	10.5	CaO	4.92
	Calcium (%)	nr	P	0.05
<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	35.4	S	1.89
	Chromium	310	MgO	2
<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	35.8	K <sub>2</sub> O	2.06
	Europium	<0.679	Na <sub>2</sub> O	1.227
<b>Stability</b> This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	3540	LOI1000	6.83
	Hafnium	2.9	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)	<11.4	'nr': Not Reported	
	Iron (%)	8.99		
	Lanthanum	13.5		
	Lutetium	0.321		
	Mercury	nr		
	Molybdenum	8.13		
	Neodymium	nr		
	Nickel	333		
	Potassium (%)	nr		
	Rubidium	117		
	Samarium	3.87		
	Scandium	17.9		
	Selenium	<2.04		
	Silver	2.4		
	Sodium (%)	0.909		
	Strontium	nr		
	Tantalum	0.651		
	Tellurium	<9.53		
	Terbium	0.486		
	Thorium	4.59		
	Tin	<69.9		
	Tungsten	36.6		
	Uranium	1.76		
	Ytterbium	1.44		
	Zinc	410		
	Zirconium	<330		

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

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