

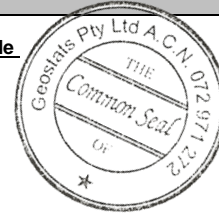
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM316-9

Certified Control Values



GBM316-9

Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	3	1	47	+/- 0.3
Copper (ppm)	710	23	73	+/- 5.5
Zinc (ppm)	40	3	67	+/- 0.8
Lead (ppm)	10	2	59	+/- 0.6
Arsenic (ppm)	3	nr	nr	nr
Cobalt (ppm)	7	1	63	+/- 0.2
Silver (ppm)	0.5	0.1	41	+/- 0.05

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	3	2	43	+/- 0.5
Copper (ppm)	717	34	82	+/- 7.4
Zinc (ppm)	35	5	63	+/- 1.2
Lead (ppm)	8	2	54	+/- 0.6
Arsenic (ppm)	3	nr	nr	nr
Cobalt (ppm)	7	1	59	+/- 0.3
Silver (ppm)	0.4	0.1	40	+/- 0.03

CRM Details

Control Statistic Details	Neutron Activation Analysis Results (ppm, unless otherwise noted)	Major Elements by Fusion / XRF (%)	
		Fe	3.07
Control statistics were produced from results accumulated in the April-2016 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony 0.3	SiO ₂	60.67
Material Description This material is described as a Copper gold tailings, low sulphide ex Philippines.	Arsenic 2	Al ₂ O ₃	16.9
Colour Designation (ISCC-NBS, SP440) This material is very light gray in colour.	Barium 1120	TiO ₂	0.38
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Bromine <2	MnO	0.067
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.	Cadmium <10	CaO	3.89
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.	Caesium 1	P	0.122
Stability This product remains stable in its original packaging, away from direct sunlight.	Calcium (%) nr	S	0.057
Material Safety This product is not hazardous and non-toxic.	Cerium 17.6	MgO	1.4
	Chromium <20	K ₂ O	4.7
	Cobalt 7	Na ₂ O	5.044
	Europium 0.6	LOI1000	2.04
	Gold (ppb) 109		
	Hafnium <5		
	Iridium (ppb) <50	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Iron (%) 3.1	'nr': Not Reported	
	Lanthanum 9		
	Lutetium 0.129		
	Mercury nr		
	Molybdenum <10		
	Neodymium nr		
	Nickel <20		
	Potassium (%) nr		
	Rubidium 60		
	Samarium 2.5		
	Scandium 5.8		
	Selenium <10		
	Silver <5		
	Sodium (%) 3.46		
	Strontium nr		
	Tantalum <2		
	Tellurium <20		
	Terbium <1		
	Thorium 1.7		
	Tin <200		
	Tungsten <5		
	Uranium 1		
	Ytterbium 1		
	Zinc <100		
	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

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