

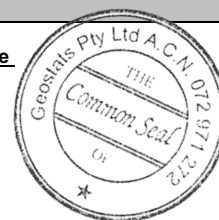
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM913-4

Certified Control Values



GBM913-4

Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	104	7	65	+/- 1.7
Copper (ppm)	1556	43	69	+/- 10.3
Zinc (ppm)	282	14	66	+/- 3.4
Lead (ppm)	291	13	65	+/- 3.3
Arsenic (ppm)	255	12	54	+/- 3.4
Cobalt (ppm)	193	13	70	+/- 3
Silver (ppm)	2.0	0.2	49	+/- 0.05

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	102	9	59	+/- 2.5
Copper (ppm)	1534	73	73	+/- 17.2
Zinc (ppm)	250	17	65	+/- 4.2
Lead (ppm)	195	24	57	+/- 6.3
Arsenic (ppm)	256	16	63	+/- 4
Cobalt (ppm)	192	15	58	+/- 4
Silver (ppm)	1.9	0.2	62	+/- 0.04

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 October-2013 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	37.4	Fe
Material Description This material is described as a High sulphide epithermal deposit in Peru.	Arsenic	259	SiO ₂	78.11
	Barium	1140	Al ₂ O ₃	1.12
Colour Designation (ISCC-NBS, SP440) This material is medium gray in colour.	Bromine	<0.412	TiO ₂	0.978
	Cadmium	<2.86	MnO	0.01
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Caesium	0.226	CaO	0.03
	Calcium (%)	nr	P	0.011
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.	Cerium	<5.72	S	7.82
	Chromium	20.5	MgO	0.05
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.	Cobalt	195	K ₂ O	0.204
	Europium	nr	Na ₂ O	0.04
Stability This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	7390	LOI1000	8.31
	Hafnium	5.25	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
Material Safety This product is not hazardous and non-toxic.	Iridium (ppb)	<20	'nr': Not Reported	
	Iron (%)	7.81		
	Lanthanum	2.55		
	Lutetium	0.203		
	Mercury	nr		
	Molybdenum	26		
	Neodymium	nr		
	Nickel	100		
	Potassium (%)	nr		
	Rubidium	<4.63		
	Samarium	0.363		
	Scandium	3.6		
	Selenium	4.3		
	Silver	1.2		
	Sodium (%)	0.026		
	Strontium	nr		
	Tantalum	0.603		
	Tellurium	nr		
	Terbium	<0.0968		
	Thorium	2.5		
	Tin	nr		
	Tungsten	4.68		
	Uranium	1.89		
	Ytterbium	nr		
	Zinc	270		
	Zirconium	nr		

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: