

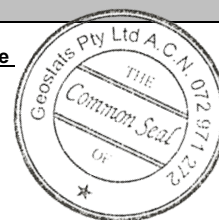
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM913-8

Certified Control Values



GBM913-8

Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	6	1	57	+/- 0.4
Copper (ppm)	4379	149	73	+/- 35.1
Zinc (ppm)	127	8	62	+/- 1.9
Lead (ppm)	923	49	65	+/- 12.3
Arsenic (ppm)	1409	72	58	+/- 19.2
Cobalt (ppm)	12	1	64	+/- 0.3
Silver (ppm)	6.7	0.4	59	+/- 0.1

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	6	2	53	+/- 0.5
Copper (ppm)	4370	198	73	+/- 46.4
Zinc (ppm)	111	12	67	+/- 2.9
Lead (ppm)	540	59	57	+/- 15.7
Arsenic (ppm)	1463	88	61	+/- 22.7
Cobalt (ppm)	12	1	55	+/- 0.3
Silver (ppm)	6.6	0.4	70	+/- 0.1

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	56.6	Fe
Material Description This material is described as a Silica alunite from Peru.	Arsenic	1440	SiO ₂	71.07
	Barium	311	Al ₂ O ₃	8.4
Colour Designation (ISCC-NBS, SP440) This material is medium light gray in colour.	Bromine	<0.502	TiO ₂	0.546
	Cadmium	3.86	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	<0.232	CaO	0.05
	Calcium (%)	nr	P	0.062
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	23.9	S	7.21
	Chromium	<38.5	MgO	0.04
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	11.8	K ₂ O	0.989
	Europium	nr	Na ₂ O	0.324
Stability This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	257	LOI1000	10.62
	Hafnium	4.14	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 (%)	5.01		
	Lanthanum	12.5		
	Lutetium	0.174		
	Mercury	nr		
	Molybdenum	42		
	Neodymium	nr		
	Nickel	<10		
	Potassium (%)	nr		
	Rubidium	6.72		
	Samarium	1.69		
	Scandium	3.19		
	Selenium	<2.75		
	Silver	6.5		
	Sodium (%)	0.257		
	Strontium	nr		
	Tantalum	0.475		
	Tellurium	nr		
	Terbium	<0.1		
	Thorium	3.26		
	Tin	nr		
	Tungsten	30.1		
	Uranium	1.96		
	Ytterbium	nr		
	Zinc	150		
	Zirconium	nr		

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