

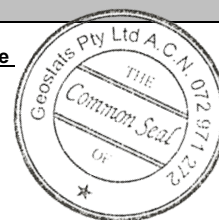
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM313-1

Certified Control Values



GBM313-1

Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	15	3	57	+/- 0.8
Copper (ppm)	3079	155	60	+/- 40.5
Zinc (ppm)	1170	68	58	+/- 18.1
Lead (ppm)	738	46	60	+/- 12.1
Arsenic (ppm)	26	2	36	+/- 0.7
Cobalt (ppm)	10	2	55	+/- 0.4
Silver (ppm)	4.9	0.4	49	+/- 0.1

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	10	3	38	+/- 0.9
Copper (ppm)	3176	176	66	+/- 43.7
Zinc (ppm)	1162	77	58	+/- 20.3
Lead (ppm)	740	51	54	+/- 14.2
Arsenic (ppm)	20	3	39	+/- 0.9
Cobalt (ppm)	7	3	46	+/- 1
Silver (ppm)	5.0	0.3	59	+/- 0.08

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 7.45	Fe	5.5
	Arsenic 26	SiO ₂	58.68
	Barium 310	Al ₂ O ₃	18.04
	Bromine 1.81	TiO ₂	0.811
	Cadmium <4.58	MnO	0.07
	Caesium 1.79	CaO	2.59
	Calcium (%) nr	P	0.031
	Cerium 33.6	S	0.267
	Chromium 70	MgO	1.52
	Cobalt 11.2	K ₂ O	2.5
	Europium <0.488	Na ₂ O	2.493
	Gold (ppb) 555	LOI1000	4.58
	Hafnium 5.89		
	Iridium (ppb) <7.19	Neutron Activation	
	Iron (%) 5.81	Analyses and Fusion /	
	Lanthanum 19.1	XRF Analyses are	
	Lutetium 0.292	single results and are	
	Mercury nr	indicative only. These	
	Molybdenum 16.8	are provided for matrix	
	Neodymium nr	identification purposes.	
	Nickel 17.7		
	Potassium (%) nr	'nr': Not Reported	
	Rubidium 122		
	Samarium 3.18		
	Scandium 9.66		
	Selenium <2.31		
	Silver 4.95		
	Sodium (%) 2.09		
	Strontium nr		
	Tantalum 1.99		
	Tellurium <5.09		
	Terbium 0.546		
	Thorium 32.2		
	Tin <39.1		
	Tungsten <5.73		
	Uranium 11.1		
	Ytterbium 1.01		
	Zinc 1300		
	Zirconium <259		
Material Description This material is described as a Composite mine ore low copper.			
Colour Designation (ISCC-NBS, SP440) This material is pale red in colour.			
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.			
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.			
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.			
Stability This product remains stable in its original packaging, away from direct sunlight.			
Material Safety This product is not hazardous and non-toxic.			

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: