

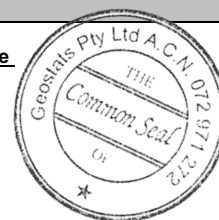
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM313-6

Certified Control Values



GBM313-6

Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	22	3	56	+/- 0.9
Copper (ppm)	37	5	57	+/- 1.4
Zinc (ppm)	66	6	54	+/- 1.7
Lead (ppm)	18	3	48	+/- 1
Arsenic (ppm)	6	2	30	+/- 0.8
Cobalt (ppm)	19	2	53	+/- 0.5
Silver (ppm)	3.0	0.2	39	+/- 0.05

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	10	3	39	+/- 1
Copper (ppm)	33	4	53	+/- 1
Zinc (ppm)	36	3	36	+/- 0.9
Lead (ppm)	14	3	41	+/- 1.1
Arsenic (ppm)	6	3	31	+/- 1.2
Cobalt (ppm)	12	5	48	+/- 1.5
Silver (ppm)	3.0	0.2	56	+/- 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 0.532
Material Description	Arsenic 5.08	SiO ₂ 52.71	
	This material is described as a Composite oxide materials.	Barium 288	Al ₂ O ₃ 18.58
Colour Designation (ISCC-NBS, SP440)	Bromine 2.47	TiO ₂ 1.267	
	This material is pale red in colour.	Cadmium <4.62	MnO 0.11
Usage	Caesium 1.3	CaO 4.81	
	This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Calcium (%) nr	P 0.05
Preparation and Packaging	Cerium 30.4	S 0.044	
	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.	Chromium 104	MgO 2.89
Assay Testwork	Cobalt 22	K ₂ O 1.63	
	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.	Europium 1.05	Na ₂ O 2.484
Stability	Gold (ppb) 576	LOI1000 4.11	
	This product remains stable in its original packaging, away from direct sunlight.	Hafnium 6.41	
Material Safety	Iridium (ppb) 7.97		Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.
	This product is not hazardous and non-toxic.	Iron (%) 8.67	'nr': Not Reported
	Lanthanum 15.7		
	Lutetium 0.341		
	Mercury nr		
	Molybdenum 12.8		
	Neodymium nr		
	Nickel 28		
	Potassium (%) nr		
	Rubidium 75.9		
	Samarium 3.88		
	Scandium 18		
	Selenium <2.09		
	Silver 3.2		
	Sodium (%) 2.13		
	Strontium nr		
	Tantalum 1.48		
	Tellurium <4.53		
	Terbium 0.667		
	Thorium 27.9		
	Tin <36.4		
	Tungsten <3.46		
	Uranium 6.67		
	Ytterbium 1.25		
	Zinc 90		
	Zirconium <282		

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