

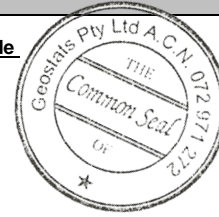
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM318-3

Certified Control Values



Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	9874	393	58	+/- 104.1
Copper (ppm)	54	7	65	+/- 1.8
Zinc (ppm)	327	51	69	+/- 12.3
Lead (ppm)	5	3	38	+/- 1.1
Arsenic (ppm)	3	1	14	+/- 0.4
Cobalt (ppm)	807	39	62	+/- 9.9
Silver (ppm)	0.5	0.4	16	+/- 0.23

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	9430	533	53	+/- 148.2
Copper (ppm)	50	8	78	+/- 1.8
Zinc (ppm)	248	33	71	+/- 7.9
Lead (ppm)	6	4	37	+/- 1.4
Arsenic (ppm)	4	2	29	+/- 0.7
Cobalt (ppm)	765	57	58	+/- 15.1
Silver (ppm)	0.8	0.7	24	+/- 0.28

CRM Details

Control Statistic Details	Neutron Activation Analysis Results (ppm, unless otherwise noted)	Major Elements by Fusion / XRF (%)	
		Fe	26.154
Control statistics were produced from results accumulated in the April-2018 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony <0.2	SiO ₂	36.5
Material Description This material is described as a Ni/Cr/Co in mafic host.	Arsenic 2.3	Al ₂ O ₃	5.3
Colour Designation (ISCC-NBS, SP440) This material is pale yellowish brown in colour.	Barium 244	TiO ₂	0.24
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Bromine 13	MnO	0.9
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 <22	CaO	0.15
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 3	P	0.005
Stability This product remains stable in its original packaging, away from direct sunlight.	Calcium (%) nr	S	0.064
Material Safety This product is not hazardous and non-toxic.	Cerium 17	MgO	6.37
	Chromium 15000	K ₂ O	0.172
	Cobalt 835	Na ₂ O	0.87
	Europium 0.9	LOI1000	7.88
	Gold (ppb) <5	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Hafnium <5	'nr': Not Reported	
	Iridium (ppb) <50		
	Iron (%) 24.1		
	Lanthanum 14		
	Lutetium 0.2		
	Mercury nr		
	Molybdenum <10		
	Neodymium nr		
	Nickel 10000		
	Potassium (%) nr		
	Rubidium <20		
	Samarium 2.2		
	Scandium 29.9		
	Selenium <10		
	Silver <5		
	Sodium (%) 0.59		
	Strontium nr		
	Tantalum <2		
	Tellurium <20		
	Terbium <1		
	Thorium <0.5		
	Tin <200		
	Tungsten <5		
	Uranium 1		
	Ytterbium 1.3		
	Zinc 370		
	Zirconium <500		

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