

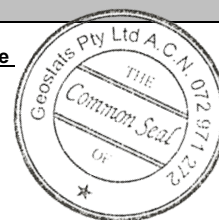
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM315-9

Certified Control Values



GBM315-9

Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	71	7	68	+/- 1.8
Copper (ppm)	34274	914	62	+/- 234
Zinc (ppm)	15131	450	59	+/- 118.3
Lead (ppm)	4600	234	74	+/- 54.6
Arsenic (ppm)	278	27	63	+/- 6.8
Cobalt (ppm)	135	9	71	+/- 2.2
Silver (ppm)	50.2	3.1	68	+/- 0.76

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	49	3	57	+/- 0.9
Copper (ppm)	34432	1317	69	+/- 318.8
Zinc (ppm)	15109	561	60	+/- 146
Lead (ppm)	4663	267	69	+/- 64.7
Arsenic (ppm)	281	17	64	+/- 4.3
Cobalt (ppm)	120	8	63	+/- 1.9
Silver (ppm)	50.5	2.6	70	+/- 0.63

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-2015 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	64.7	Fe
Material Description This material is described as a Composite Base Metal Silver - This material also certified for partial digests.	Arsenic	310	SiO ₂	44.48
	Barium	140	Al ₂ O ₃	12.19
Colour Designation (ISCC-NBS, SP440) This material is grayish black in colour.	Bromine	<0.5	TiO ₂	1.69
	Cadmium	35	MnO	0.18
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Caesium	0.5	CaO	7.97
	Calcium (%)	nr	P	0.086
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	30	S	4.806
	Chromium	170	MgO	4.69
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	151	K ₂ O	0.402
	Europium	2.3	Na ₂ O	2.46
Stability This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	21199	LOI1000	2.72
	Hafnium	4	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)	<50	'nr': Not Reported	
	Iron (%)	11.9		
	Lanthanum	20		
	Lutetium	0.5		
	Mercury	nr		
	Molybdenum	140		
	Neodymium	nr		
	Nickel	84		
	Potassium (%)	nr		
	Rubidium	10		
	Samarium	5.5		
	Scandium	33.2		
	Selenium	12		
	Silver	52		
	Sodium (%)	2		
	Strontium	nr		
	Tantalum	0.4		
	Tellurium	nr		
	Terbium	0.9		
	Thorium	3		
	Tin	nr		
	Tungsten	69		
	Uranium	1.7		
	Ytterbium	3		
	Zinc	16500		
	Zirconium	nr		

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