

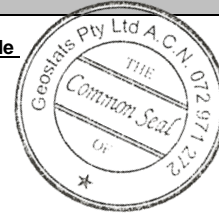
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM915-7

Certified Control Values



Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	73	4	59	+/- 1.2
Copper (ppm)	5934	191	70	+/- 46
Zinc (ppm)	5037	227	68	+/- 55.4
Lead (ppm)	2487	128	67	+/- 31.5
Arsenic (ppm)	329	17	56	+/- 4.5
Cobalt (ppm)	47	3	56	+/- 0.7
Silver (ppm)	12.8	1.5	62	+/- 0.38

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	65	5	53	+/- 1.5
Copper (ppm)	6057	226	70	+/- 54.4
Zinc (ppm)	5150	197	60	+/- 51.4
Lead (ppm)	2525	117	63	+/- 29.8
Arsenic (ppm)	334	16	55	+/- 4.2
Cobalt (ppm)	40	5	58	+/- 1.3
Silver (ppm)	13.1	1.1	70	+/- 0.27

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-2015 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	216	Fe
Material Description This material is described as a Cu Pb Zn Materials sulphide.	Arsenic	348	SiO ₂	57.76
	Colour Designation (ISCC-NBS, SP440) This material is medium dark gray in colour.	Barium	370	Al ₂ O ₃
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.		Bromine	<2	TiO ₂
	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	<10	MnO
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	<1	CaO
	Stability This product remains stable in its original packaging, away from direct sunlight.	Calcium (%)	nr	P
Material Safety This product is not hazardous and non-toxic.		Cerium	42.6	S
	Neutron Activation Analysis Results (ppm, unless otherwise noted)	Chromium	30	MgO
Cobalt		51	K ₂ O	1.71
Major Elements by Fusion / XRF (%)	Europium	1.35	Na ₂ O	nr
	Gold (ppb)	4440	LOI1000	0.42
Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	Hafnium	5		
	Iridium (ppb)	<50		
'nr': Not Reported	Iron (%)	8		
	Lanthanum	22		
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	Mercury	nr		
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	Neodymium	nr		
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	Potassium (%)	nr		
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	Samarium	5.3		
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	Selenium	<10		
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	Sodium (%)	2.16		
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	Tantalum	2		
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	Terbium	1		
Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	Thorium	11.2		
	Tin	<200		
Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	Tungsten	8		
	Uranium	4		
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	Zinc	5300		
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Geostats Pty Ltd, Certified Geochem Base Metal Reference Material, Product Code: