

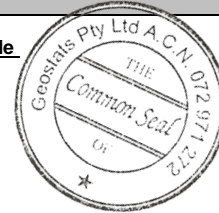
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM916-3

Certified Control Values



Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	48	3	67	+/- 0.8
Copper (ppm)	1293	46	75	+/- 10.6
Zinc (ppm)	79	6	65	+/- 1.6
Lead (ppm)	10	2	53	+/- 0.7
Arsenic (ppm)	12	2	50	+/- 0.7
Cobalt (ppm)	14	1	59	+/- 0.3
Silver (ppm)	1.0	0.2	49	+/- 0.06

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	43	3	60	+/- 0.9
Copper (ppm)	1294	54	84	+/- 11.8
Zinc (ppm)	70	6	68	+/- 1.6
Lead (ppm)	6	2	51	+/- 0.6
Arsenic (ppm)	11	2	46	+/- 0.6
Cobalt (ppm)	13	1	55	+/- 0.4
Silver (ppm)	0.9	0.1	50	+/- 0.04

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-2016 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	1.11	Fe
Material Description This material is described as a Low Cu Sulphide ex Western Australia.	Arsenic	11.2	SiO ₂	63.09
	Colour Designation (ISCC-NBS, SP440) This material is light gray in colour.	Barium	233	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	7	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	38.7	S
	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes. 'nr': Not Reported	Chromium	79.4	MgO
Cobalt		15	K ₂ O	1.83
Major Elements by Fusion / XRF (%)	Europium	0.702	Na ₂ O	3.09
	Gold (ppb)	547	LOI1000	1.13
Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes. 'nr': Not Reported	Hafnium	<5		
	Iridium (ppb)	<50		
Major Elements by Fusion / XRF (%)	Iron (%)	4.1		
	Lanthanum	18.7		
Major Elements by Fusion / XRF (%)	Lutetium	0.14		
	Mercury	nr		
Major Elements by Fusion / XRF (%)	Molybdenum	27		
	Neodymium	nr		
Major Elements by Fusion / XRF (%)	Nickel	50		
	Potassium (%)	nr		
Major Elements by Fusion / XRF (%)	Rubidium	133		
	Samarium	2.9		
Major Elements by Fusion / XRF (%)	Scandium	10.9		
	Selenium	<10		
Major Elements by Fusion / XRF (%)	Silver	<5		
	Sodium (%)	2.33		
Major Elements by Fusion / XRF (%)	Strontium	nr		
	Tantalum	<2		
Major Elements by Fusion / XRF (%)	Tellurium	<20		
	Terbium	<1		
Major Elements by Fusion / XRF (%)	Thorium	7.1		
	Tin	<200		
Major Elements by Fusion / XRF (%)	Tungsten	21		
	Uranium	2		
Major Elements by Fusion / XRF (%)	Ytterbium	0.551		
	Zinc	<100		
Major Elements by Fusion / XRF (%)	Zirconium	<500		

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