

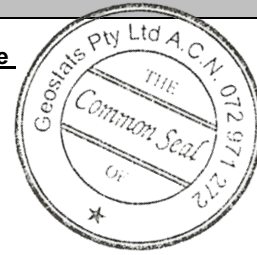
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

GBM314-16

Certified Control Values



GBM314-16

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	661	nr	nr	nr
Copper (ppm)	160964	4819	123	+/- 864
Zinc (ppm)	2898	153	117	+/- 28
Lead (ppm)	884	nr	nr	nr
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	89.4	5.2	115	+/- 0.97
Sulphur (%)	22.79	0.78	94	+/- 0.16

CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the April-2014 round robin. The number of results used to certify each analyte is shown in the table above.	<u>Neutron Activation Analysis Results (ppm, unless otherwise noted)</u>		<u>Major Elements by Fusion / XRF (%)</u>	
	<u>Material Description</u> This material is described as a Cu / Au sulphide concentrate.	Antimony	217	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is medium dark gray in colour.	Arsenic	209	SiO ₂	18.86
<u>Usage</u> This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Barium	<310	Al ₂ O ₃	5.06
<u>Preparation and Packaging</u> 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.	Bromine	<2	TiO ₂	0.28
<u>Assay Testwork</u> 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.	Cadmium	<24.9	MnO	0.04
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	<2.5	CaO	1.97
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	0.059
	Cerium	<93	S	23.2
	Chromium	<160	MgO	0.78
	Cobalt	310	K ₂ O	0.441
	Europium	<4	Na ₂ O	0.98
	Gold (ppb)	99800	LOI1000	11.4
	Hafnium	<7		
	Iridium (ppb)	<181		
	Iron (%)	31		
	Lanthanum	26		
	Lutetium	<1.08		
	Mercury	nr		
	Molybdenum	2718		
	Neodymium	nr		
	Nickel	718		
	Potassium (%)	nr		
	Rubidium	<30		
	Samarium	2.5		
	Scandium	3.8		
	Selenium	167		
	Silver	97		
	Sodium (%)	0.89		
	Strontium	nr		
	Tantalum	<0.95		
	Tellurium	nr		
	Terbium	<1.4		
	Thorium	13.71		
	Tin	nr		
	Tungsten	14		
	Uranium	7.4		
	Ytterbium	<6		
	Zinc	2800		
	Zirconium	nr		

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