

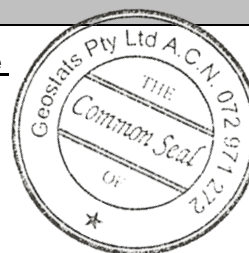
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM911-1

Certified Control Values



GBM911-1

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	23	4	242	+/- 0.5
Copper (ppm)	10034	399	283	+/- 46.8
Zinc (ppm)	1219	75	290	+/- 8.6
Lead (ppm)	5846	389	266	+/- 47
Arsenic (ppm)	337	52	247	+/- 6.5
Cobalt (ppm)	31	4	248	+/- 0.5
Silver (ppm)	11.9	1.0	286	+/- 0.12

CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the October-2011 & October-2012 round robins. 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 ore low sulphide.	Antimony	352.5	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is medium light gray in colour.	Arsenic	362.5	SiO ₂	63.51
<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	495	Al ₂ O ₃	13.455
<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	<0.5	TiO ₂	0.887
<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	<5	MnO	0.07
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	1.75	CaO	3.34
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	0.054
	Cerium	50.5	S	1.42
	Chromium	22.25	MgO	1.595
	Cobalt	34.5	K ₂ O	2.91
	Europium	0.925	Na ₂ O	3.531
	Gold (ppb)	952.5	LOI1000	1.315
	Hafnium	11.65	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Iridium (ppb)	<10	'nr': Not Reported	
	Iron (%)	5.163		
	Lanthanum	27.9		
	Lutetium	0.483		
	Mercury	nr		
	Molybdenum	34		
	Neodymium	nr		
	Nickel	23.75		
	Potassium (%)	nr		
	Rubidium	145		
	Samarium	4.575		
	Scandium	12.85		
	Selenium	3		
	Silver	9.75		
	Sodium (%)	2.573		
	Strontium	nr		
	Tantalum	1.525		
	Tellurium	<10		
	Terbium	0.775		
	Thorium	18.75		
	Tin	<200		
	Tungsten	<2		
	Uranium	10.125		
	Ytterbium	3.075		
	Zinc	1287.5		
	Zirconium	<500		

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