

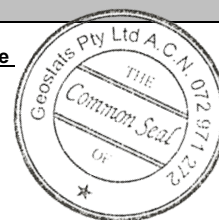
# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

## GBM314-1

Certified Control Values



GBM314-1

### Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	8	3	57	+/- 0.8
Copper (ppm)	8432	352	70	+/- 84.4
Zinc (ppm)	116161	3483	55	+/- 950.2
Lead (ppm)	20010	759	58	+/- 201.3
Arsenic (ppm)	5246	438	59	+/- 115.2
Cobalt (ppm)	83	7	69	+/- 1.7
Silver (ppm)	182.3	9.8	59	+/- 2.57

### Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	7	3	48	+/- 0.9
Copper (ppm)	8363	416	74	+/- 97.1
Zinc (ppm)	116416	3905	46	+/- 1172.5
Lead (ppm)	20119	805	49	+/- 233.7
Arsenic (ppm)	5520	540	62	+/- 138.4
Cobalt (ppm)	84	13	61	+/- 3.4
Silver (ppm)	179.5	6.8	61	+/- 1.76

### 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-2014 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony 272	Fe	22.42
	Arsenic 5200	SiO <sub>2</sub>	16.06
	Barium <370	Al <sub>2</sub> O <sub>3</sub>	3.16
	Bromine <5	TiO <sub>2</sub>	0.12
	Cadmium 342	MnO	0.11
	Caesium <3.5	CaO	3.83
	Calcium (%) nr	P	0.008
	Cerium <83	S	29.4
	Chromium 220	MgO	3.83
	Cobalt 89	K <sub>2</sub> O	0.337
	Europium <6	Na <sub>2</sub> O	3.81
	Gold (ppb) 1980	LOI1000	22.1
	Hafnium <8		
	Iridium (ppb) <213	Neutron Activation	
	Iron (%) 23	Analyses and Fusion /	
	Lanthanum 9	XRF Analyses are	
	Lutetium <0.9	single results and are	
	Mercury nr	indicative only. These	
	Molybdenum <10	are provided for matrix	
	Neodymium nr	identification purposes.	
	Nickel 10		
	Potassium (%) nr	'nr': Not Reported	
	Rubidium <50		
	Samarium 1.2		
	Scandium <1.3		
	Selenium <52.7		
	Silver 200		
	Sodium (%) 0.047		
	Strontium nr		
	Tantalum <2		
	Tellurium nr		
	Terbium <1.4		
	Thorium <3.5		
	Tin nr		
	Tungsten <3		
	Uranium 3.8		
	Ytterbium <7		
	Zinc 112000		
	Zirconium nr		

#### Control Statistic Details

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#### Material Description

This material is described as a Cu / Pb / Zn sulphide, Sweden.

#### Colour Designation (ISCC-NBS, SP440)

This material is olive gray in colour.

#### Usage

This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.

#### 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.

#### 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.

#### Stability

This product remains stable in its original packaging, away from direct sunlight.

#### Material Safety

This product is not hazardous and non-toxic.

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