

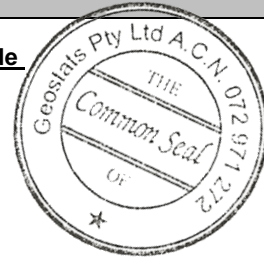
# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

## GBM315-14

Certified Control Values



GBM315-14

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	300	15	91	+/- 3
Copper (ppm)	29606	976	262	+/- 119
Zinc (ppm)	22480	658	216	+/- 88
Lead (ppm)	7355	249	224	+/- 33
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	36.3	1.8	229	+/- 0.23
Sulphur (%)	4.92	0.16	197	+/- 0.02

### CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the April-2015 & October-2018 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 Sulphide Gold copper lead zinc ore.	Antimony	557	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is medium light gray in colour.	Arsenic	858	SiO <sub>2</sub>	50.42
<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	258.5	Al <sub>2</sub> O <sub>3</sub>	11.61
<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	<1	TiO <sub>2</sub>	1.17
<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	36	MnO	0.14
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	1	CaO	5.47
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	0.064
	Cerium	34	S	4.806
	Chromium	115.5	MgO	3.42
	Cobalt	96	K <sub>2</sub> O	1.56
	Europium	1.6	Na <sub>2</sub> O	2.48
	Gold (ppb)	26200	LOI1000	3.23
	Hafnium	<1	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Iridium (ppb)	<50	'nr': Not Reported	
	Iron (%)	8.75		
	Lanthanum	18		
	Lutetium	0.45		
	Mercury	nr		
	Molybdenum	97.5		
	Neodymium	nr		
	Nickel	315.5		
	Potassium (%)	nr		
	Rubidium	62		
	Samarium	4.05		
	Scandium	19.7		
	Selenium	23.5		
	Silver	33.5		
	Sodium (%)	1.735		
	Strontium	nr		
	Tantalum	0.9		
	Tellurium	<20		
	Terbium	1.3		
	Thorium	8.9		
	Tin	<200		
	Tungsten	6		
	Uranium	5.15		
	Ytterbium	2.6		
	Zinc	23000		
	Zirconium	<500		

20 Hines Road, O'Connor, Western Australia 6163  
Phone: +61 8 9314 2566 | Email: info@geostats.com.au  
Website: www.geostats.com.au