

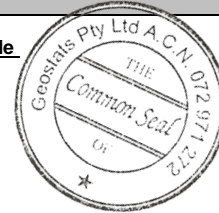
# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

## GBM916-7

Certified Control Values



GBM916-7

### Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	769	42	71	+/- 9.9
Copper (ppm)	3170	131	77	+/- 29.9
Zinc (ppm)	90	10	69	+/- 2.4
Lead (ppm)	8	3	58	+/- 0.7
Arsenic (ppm)	31	3	54	+/- 0.8
Cobalt (ppm)	49	3	66	+/- 0.7
Silver (ppm)	0.4	nr	nr	nr

### Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	688	53	65	+/- 13.3
Copper (ppm)	3156	143	90	+/- 30
Zinc (ppm)	42	6	53	+/- 1.6
Lead (ppm)	7	2	51	+/- 0.6
Arsenic (ppm)	30	4	55	+/- 1.2
Cobalt (ppm)	46	4	60	+/- 1
Silver (ppm)	0.5	0.4	39	+/- 0.12

### 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	6.61	Fe
<b>Material Description</b> This material is described as an Acurite and Malachite, with Carbonate, Quartz, Talc and Fuchsite ex Turkey.	Arsenic	33.7	SiO <sub>2</sub>	48.52
<b>Colour Designation (ISCC-NBS, SP440)</b> This material is grayish orange in colour.	Barium	306	Al <sub>2</sub> O <sub>3</sub>	0.54
<b>Usage</b> 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 <sub>2</sub>	0.01
<b>Preparation and Packaging</b> 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	0.18
<b>Assay Testwork</b> 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	<1	CaO	13.03
<b>Stability</b> This product remains stable in its original packaging, away from direct sunlight.	Calcium (%)	nr	P	0.004
<b>Material Safety</b> This product is not hazardous and non-toxic.	Cerium	<10	S	0.11
	Chromium	2040	MgO	8.58
	Cobalt	51	K <sub>2</sub> O	0.06
	Europium	<0.131	Na <sub>2</sub> O	<0.01
	Gold (ppb)	8.18	LOI1000	19.91
	Hafnium	<5		
	Iridium (ppb)	<50	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
	Iron (%)	4.4	'nr': Not Reported	
	Lanthanum	0.505		
	Lutetium	<0.05		
	Mercury	nr		
	Molybdenum	<10		
	Neodymium	nr		
	Nickel	840		
	Potassium (%)	nr		
	Rubidium	<20		
	Samarium	<0.2		
	Scandium	3.5		
	Selenium	<10		
	Silver	<5		
	Sodium (%)	0.053		
	Strontium	nr		
	Tantalum	<2		
	Tellurium	<20		
	Terbium	<1		
	Thorium	<0.5		
	Tin	<200		
	Tungsten	<5		
	Uranium	<1		
	Ytterbium	<0.175		
	Zinc	100		
	Zirconium	<500		

20 Hines Road, O'Connor, Western Australia 6163  
Phone : +61 8 9314 2566, Fax : +61 8 9314 3699  
e-mail : [pjh@geostats.com.au](mailto:pjh@geostats.com.au), [srr@geostats.com.au](mailto:srr@geostats.com.au)  
Website <http://www.geostats.com.au>

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