

GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM904-9

Certified Control Values



GBM904-9

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

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	1122	61	52	+/- 17.1
Copper (ppm)	351	25	67	+/- 6.1
Zinc (ppm)	287	17	59	+/- 4.5
Lead (ppm)	90	10	57	+/- 2.6
Arsenic (ppm)	6474	429	54	+/- 118.3
Cobalt (ppm)	117	11	54	+/- 3
Silver (ppm)	1.8	0.5	52	+/- 0.1

CRM Details

<u>Control Statistic Details</u> Control statistics were produced from results accumulated in the October-2004 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 Gold Ore Minor Sulphide.	Antimony	44.9	Fe
<u>Colour Designation (ISCC-NBS, SP440)</u> This material is light gray in colour.	Arsenic	6650	SiO ₂	nr
<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	390	Al ₂ O ₃	nr
<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	22	TiO ₂	nr
<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	nr
<u>Stability</u> This product remains stable in its original packaging, away from direct sunlight.	Caesium	7.9	CaO	nr
<u>Material Safety</u> This product is not hazardous and non-toxic.	Calcium (%)	nr	P	nr
	Cerium	47	S	nr
	Chromium	360	MgO	nr
	Cobalt	130	K ₂ O	nr
	Europium	2	Na ₂ O	nr
	Gold (ppb)	4300	LOI1000	nr
	Hafnium	<3		
	Iridium (ppb)	<50		
	Iron (%)	8.1		
	Lanthanum	27		
	Lutetium	0.7		
	Mercury	nr		
	Molybdenum	17		
	Neodymium	nr		
	Nickel	1360		
	Potassium (%)	nr		
	Rubidium	57		
	Samarium	3.6		
	Scandium	19		
	Selenium	<5		
	Silver	nr		
	Sodium (%)	1		
	Strontium	nr		
	Tantalum	<0.5		
	Tellurium	<25		
	Terbium	<0.5		
	Thorium	4.7		
	Tin	<340		
	Tungsten	24		
	Uranium	7.3		
	Ytterbium	<2		
	Zinc	490		
	Zirconium	<480		

20 Hines Road, O'Connor, Western Australia 6163

Phone : +61 8 9314 2566, Fax : +61 8 9314 3699

e-mail : pjh@geostats.com.au, srr@geostats.com.au

Website <http://www.geostats.com.au>