## **GEOSTATS PTY LTD**

Mining Industry Consultants
Reference Material Manufacture and Sales

**Certified Geochem Base Metal Reference Material Product Code** 

## **GBM399-5**

## **Certified Control Values**



Major Elements by

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval	
Nickel (ppm)	24412	1248	60	+/- 325.1	
Copper (ppm)	29424	1446	77	+/- 330.4	
Zinc (ppm)	9493	504	66	+/- 124.8	
Lead (ppm)	21173	1402	67	+/- 344.6	
Arsenic (ppm)	320	27	54	+/- 7.4	
Cobalt (ppm)	46	5	55	+/- 1.4	
Silver (ppm)	24.2	1.5	64	+/- 0.4	

## **CRM Details**

**Neutron Activation** 

Control Statistic Details	Analysis Results (ppm,		Fusion / XRF (%)	
Control statistics were produced from results accumulated in the April-1999 round	unless otherwise noted)			
robin. The number of results used to certify each analyte is shown in the table	Antimony	7.69	Fe	nr
above.	Arsenic	329	SiO <sub>2</sub>	nr
	Barium	<100	Al <sub>2</sub> O <sub>3</sub>	nr
Material Description	Bromine	<1	TiO <sub>2</sub>	nr
This material is described as an Oxide Copper ore.	Cadmium	nr	MnO	nr
··	Caesium	18.9	CaO	nr
	Calcium (%)	1.29	Р	nr
Colour Designation (ISCC-NBS, SP440)	Cerium	8.86	S	nr
This material is pale reddish brown in colour.	Chromium	597	MgO	nr
'	Cobalt	48.2	K <sub>2</sub> O	nr
Usage	Europium	< 0.5	Na <sub>2</sub> O	nr
This product is for use in the mining industry as a reference material for	Gold (ppb)	3490	LOI1000	nr
monitoring and testing the accuracy of laboratory assaying.	Hafnium	17.6		
	Iridium (ppb)	<20	Neutron Act	ivation
Preparation and Packaging	Iron (%)	4.47	Analyses ar	nd Fusion /
All CRMs are dried in an oven for a minimum of 12 hours at 110°C. The dry	Lanthanum	4.34	XRF Analyses are	
material is then pulverised to better than 75 micron (nominal mean of 45 micron)	Lutetium	<0.2	single results and are	
using an air classifier. The material is then homogenised and stored in a sealed,	Mercury	nr	indicative only. These	
stable container ready for final packaging.	Molybdenum	342	are provided for matrix	
	Neodymium	nr	identification	า
Materials are statistically sampled from stores, then packaged into either heat	Nickel	nr	purposes.	
sealed, air tight, plastic pulp packets or screw top sealed plastic containers ready	Potassium (%)	2.43		
for distribution. All packaging has been chosen to ensure minimal contamination	Rubidium	741	'nr': Not Rep	orted
from outside sources during shipment, use and storage.	Samarium	0.94		
	Scandium	6.33		
Assay Testwork	Selenium	<5		
All standards are tested thoroughly in the Geostats bi-annual laboratory survey.	Silver	25.2		
This involves assaying by multiple laboratories from around the world. Results are	Sodium (%)	0.983		
compiled into a comprehensive report detailing statistics for each standard. Assay	Strontium	nr		
distributions are checked and processed statistically, producing monitoring	Tantalum	<1		
statistics for these standards. Materials are tested regularly to ensure stability and	Tellurium	<5		
homogeneity.	Terbium	nr		
	Thorium	2		
<u>Stability</u>	Tin	nr		
This product remains stable in its original packaging, away from direct sunlight.	Tungsten	16		
	Uranium	<2		
Material Safety	Ytterbium	0.79		
This product is not hazardous and non-toxic.	Zinc	10500		
	Zirconium	765		

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