

GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Ore Grade Base Metal Reference Material Product Code

GBM304-16

Certified Control Values

Ore Grade Base Metal Analyses

Element	Grade	Standard Deviation	No of Analyses	Confidence Interval
Nickel (ppm)	16	11	14	+/- 6
Copper (ppm)	22721	915	48	+/- 268
Zinc (ppm)	718	72	43	+/- 22
Lead (ppm)	728	56	36	+/- 19
Cobalt (ppm)	nr	nr	nr	nr
Silver (ppm)	nr	nr	nr	nr
Sulphur (%)	nr	nr	nr	nr

CRM Details

Control Statistic Details

Control statistics were produced from results accumulated in the :

April-2004
36

Geostats Pty Ltd Laboratory Round Robin Program.
laboratories (at least) tested this material for base metal content.

Source Material

Prior to homogenisation and testing, this material was sourced from Low Grade Copper / Lead / Zinc Ore (Sulphide)

Colour Designation

Light gray

Usage

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

Preparation and Packaging

All standards are dried in an oven for a minimum of 12 hours at 110C. 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

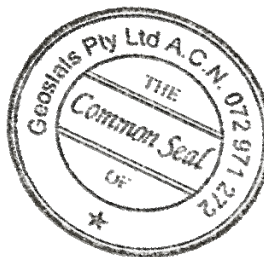
All standards are tested thoroughly in the Geostats bi-annual laboratory survey. This involves assaying by a minimum of 50 reputable laboratories selected from across the world using a variety of methods (including AR, 3AD, 4AD and ICP, AAS and XRF). Results are compiled into a comprehensive report detailing 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.

Neutron Activation Analysis Results (ppm)

Antimony	nr
Arsenic	nr
Barium	nr
Bromine	nr
Cadmium	nr
Cerium	nr
Caesium	nr
Chromium	nr
Cobalt	nr
Europium	nr
Gold ppb	nr
Hafnium	nr
Iridium ppb	nr
Iron %	nr
Lanthanum	nr
Lutetium	nr
Molybdenum	nr
Nickel	nr
Rubidium	nr
Samarium	nr
Scandium	nr
Selenium	nr
Sodium %	nr
Tantalum	nr
Tellurium	nr
Terbium	nr
Thorium	nr
Tin	nr
Tungsten	nr
Uranium	nr
Ytterbium	nr
Zinc	nr
Zirconium	nr
Calcium%	nr
Potassium %	nr
Silver	nr
Mercury	nr
Neodymium	nr
Strontium	nr

Major Elements Fusion / XRF (%)

Fe	nr
SiO ₂	nr
Al ₂ O ₃	nr
TiO ₂	nr
MnO	nr
CaO	nr
P	nr
S	nr
MgO	nr
K ₂ O	nr
Na ₂ O	nr
LOI1000	nr



10A Marsh Close, 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>

GBM304-16

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