

# GEOSTATS PTY LTD

Mining Industry Consultants  
Reference Material Manufacture and Sales

## Certified Base Metal Reference Material Product Code

# GBM396-10

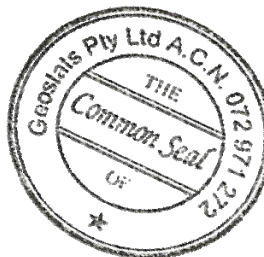
### Certified Control Values

#### Base Metal Analyses

| Element       | Grade | Standard Deviation | No of Analyses | Confidence Interval |
|---------------|-------|--------------------|----------------|---------------------|
| Nickel (ppm)  | 95    | 11                 | 42             | +/- 3.5             |
| Copper (ppm)  | 2897  | 174                | 50             | +/- 50              |
| Zinc (ppm)    | 10601 | 767                | 48             | +/- 225.1           |
| Lead (ppm)    | 1018  | 78                 | 47             | +/- 23.1            |
| Arsenic (ppm) | 180   | 22                 | 40             | +/- 7.1             |
| Cobalt (ppm)  | nr    | nr                 | nr             | nr                  |
| Silver (ppm)  | 11.6  | 0.7                | 40             | +/- 0.2             |

### CRM Details

| Control Statistic Details  | Neutron Activation     |       | Major Elements                 |    |
|--|------------------------|-------|--------------------------------|----|
|  | Analysis Results (ppm) |       | Fusion / XRF (%)               |    |
| Control statistics were produced from results accumulated in the :<br><u>April-1996</u> Geostats Pty Ltd Laboratory Round Robin Program.<br><u>40</u> laboratories (at least) tested this material for base metal content. | Antimony               | 25.5  | Fe                             | nr |
|  | Arsenic                | 185   | SiO <sub>2</sub>               | nr |
|  | Barium                 | 129   | Al <sub>2</sub> O <sub>3</sub> | nr |
|  | Bromine                | <2    | TiO <sub>2</sub>               | nr |
|  | Cadmium                | nr    | MnO                            | nr |
|  | Cerium                 | 24.3  | CaO                            | nr |
|  | Caesium                | 1.92  | P                              | nr |
|  | Chromium               | 327   | S                              | nr |
|  | Cobalt                 | 71.4  | MgO                            | nr |
|  | Europium               | 1.07  | K <sub>2</sub> O               | nr |
|  | Gold ppb               | 2440  | Na <sub>2</sub> O              | nr |
|  | Hafnium                | 4.96  | LOI1000                        | nr |
|  | Iridium ppb            | <20   |                                |    |
|  | Iron %                 | 11    |                                |    |
|  | Lanthanum              | 14.4  |                                |    |
|  | Lutetium               | 0.27  |                                |    |
|  | Molybdenum             | <5    |                                |    |
|  | Nickel                 | nr    |                                |    |
|  | Rubidium               | 35    |                                |    |
|  | Samarium               | 2.42  |                                |    |
|  | Scandium               | 14    |                                |    |
|  | Selenium               | <5    |                                |    |
|  | Sodium %               | 0.201 |                                |    |
|  | Tantalum               | <1    |                                |    |
|  | Tellurium              | nr    |                                |    |
|  | Terbium                | nr    |                                |    |
|  | Thorium                | 4.64  |                                |    |
|  | Tin                    | nr    |                                |    |
|  | Tungsten               | 4.07  |                                |    |
|  | Uranium                | <2    |                                |    |
|  | Ytterbium              | 1.86  |                                |    |
|  | Zinc                   | 9760  |                                |    |
|  | Zirconium              | nr    |                                |    |
|  | Calcium%               | nr    |                                |    |
|  | Potassium %            | 0.54  |                                |    |
|  | Silver                 | <5    |                                |    |
|  | Mercury                | nr    |                                |    |
|  | Neodymium              | nr    |                                |    |
|  | Strontium              | nr    |                                |    |



#### Control Statistic Details

Control statistics were produced from results accumulated in the :  
April-1996 Geostats Pty Ltd Laboratory Round Robin Program.  
40 laboratories (at least) tested this material for base metal content.

#### Source Material

Prior to homogenisation and testing, this material was sourced from Low Grade Supergene Pb/Zn Ore ex Murchison

#### Colour Designation

nr

#### 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.

10A Marsh Close, 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>

GBM396-10

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