GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM922-3

Certified Control Values

Total Digest

| Element Grade Standard Deviation Num of Analyses Confidence Interval | | | | | |
|--|-------|--------------------|-----------------|---------------------|--|
| Element | Grade | Standard Deviation | Num of Analyses | Confidence Interval | |
| Nickel (ppm) | 32 | 2 | 57 | +/- 0.6 | |
| Copper (ppm) | 602 | 21 | 64 | +/- 5.3 | |
| Zinc (ppm) | 122 | 6 | 58 | +/- 1.7 | |
| Lead (ppm) | 16 | 3 | 57 | +/- 0.8 | |
| Arsenic (ppm) | 89 | 6 | 47 | +/- 1.8 | |
| Cobalt (ppm) | 23 | 1 | 52 | +/- 0.3 | |
| Silver (ppm) | 1.5 | 0.3 | 52 | +/- 0.08 | |

Partial Digest

| Element | Grade | Standard Deviation | Num of Analyses | Confidence Interval |
|---------------|-------|--------------------|-----------------|---------------------|
| Nickel (ppm) | 30 | 1 | 54 | +/- 0.4 |
| Copper (ppm) | 604 | 29 | 80 | +/- 6.6 |
| Zinc (ppm) | 116 | 7 | 60 | +/- 1.7 |
| Lead (ppm) | 16 | 2 | 53 | +/- 0.6 |
| Arsenic (ppm) | 83 | 9 | 58 | +/- 2.3 |
| Cobalt (ppm) | 22 | 1 | 48 | +/- 0.3 |
| Silver (ppm) | 1.4 | 0.2 | 61 | +/- 0.04 |

CRM Details

| | Neutron Activa | tion | Major Eler | nents by |
|---|----------------|------------------|--------------------------------|-------------|
| Control Statistic Details | Analysis Resul | Fusion / XRF (%) | | |
| Control statistics were produced from results accumulated in the October-2022 | unless otherwi | se noted) | ol . | ` , |
| round robin. The number of results used to certify each analyte is shown in the | Antimony | 8.1 | Fe | 5.13 |
| table above. | Arsenic | 92 | SiO ₂ | 60.54 |
| | Barium | 243 | Al ₂ O ₃ | 15.11 |
| Material Description | Bromine | <2 | TiO ₂ | 0.67 |
| This material is described as a Fresh dacite, Pilbara, WA. | Cadmium | <10 | MnO | 0.07 |
| | Caesium | 6 | CaO | 2.68 |
| | Calcium (%) | nr | Р | 0.068 |
| Colour Designation (ISCC-NBS, SP440) | Cerium | 43 | S | 0.7 |
| This material is very light gray in colour. | Chromium | 46 | MgO | 2.96 |
| | Cobalt | 25 | K ₂ O | 2.1 |
| <u>Jsage</u> | Europium | 0.7 | Na ₂ O | 2.14 |
| This product is for use in the mining industry as a reference material for | Gold (ppb) | 28 | LOI1000 | 5.09 |
| monitoring and testing the accuracy of laboratory assaying. | Hafnium | <5 | | |
| | Iridium (ppb) | <50 | Neutron Act | ivation |
| Preparation and Packaging | Iron (%) | 5.3 | Analyses ar | d Fusion |
| All CRMs are dried in an oven for a minimum of 12 hours at 110°C. The dry | Lanthanum | 21 | XRF Analys | es are |
| material is then pulverised to better than 75 micron (nominal mean of 45 | Lutetium | 0.3 | single result | |
| micron) using an air classifier. The material is then homogenised and stored in | Mercury | nr | - | |
| a sealed, stable container ready for final packaging. | Molybdenum | <10 | indicative only. These | |
| | Neodymium | nr | are provided | d for matri |
| Materials are statistically sampled from stores, then packaged into either heat | Nickel | <100 | identification | purposes |
| sealed, air tight, plastic pulp packets or screw top sealed plastic containers | Potassium (%) | nr | | |
| ready for distribution. All packaging has been chosen to ensure minimal | Rubidium | 86 | 'nr': Not Rep | orted |
| contamination from outside sources during shipment, use and storage. | Samarium | 3.7 | | |
| | Scandium | 12 | | |
| Assay Testwork | Selenium | <10 | | |
| All standards are tested thoroughly in the Geostats bi-annual laboratory survey. | Silver | <5 | | |
| This involves assaying by multiple laboratories from around the world. Results | Sodium (%) | 1.47 | | |
| are compiled into a comprehensive report detailing statistics for each standard. | Strontium | nr | | |
| Assay distributions are checked and processed statistically, producing | Tantalum | <2 | | |
| monitoring statistics for these standards. Materials are tested regularly to | Tellurium | <20 | | |
| ensure stability and homogeneity. | Terbium | <1 | | |
| | Thorium | 5 | | |
| <u>Stability</u> | Tin | <200 | | |
| This product remains stable in its original packaging, away from direct sunlight. | Tungsten | 5 | | |
| | Uranium | <1 | | |
| Material Safety | Ytterbium | 1.8 | | |
| This product is not hazardous and non-toxic. | Zinc | <200 | | |
| | Zirconium | <500 | | |

20 Hines Road, O'Connor, Western Australia 6163
Phone: +61 8 9314 2566 | Email: info@geostats.com.au
Website: www.geostats.com.au