

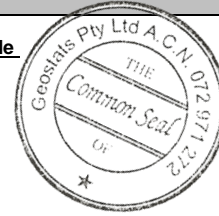
GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM913-5

Certified Control Values



Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	25	2	125	+/- 0.4
Copper (ppm)	2876	130	147	+/- 21.3
Zinc (ppm)	3705	152	130	+/- 26.4
Lead (ppm)	243	17	127	+/- 3
Arsenic (ppm)	2517	110	109	+/- 20.9
Cobalt (ppm)	54	3	120	+/- 0.5
Silver (ppm)	0.3	nr	nr	nr

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	24	2	106	+/- 0.5
Copper (ppm)	2717	112	147	+/- 18.3
Zinc (ppm)	3704	256	131	+/- 44.4
Lead (ppm)	187	21	119	+/- 3.9
Arsenic (ppm)	2567	176	117	+/- 32.3
Cobalt (ppm)	55	3	105	+/- 0.6
Silver (ppm)	0.3	nr	nr	nr

CRM Details

Control Statistic Details	Neutron Activation Analysis Results (ppm, unless otherwise noted)	Major Elements by Fusion / XRF (%)	
<p>Control statistics were produced from results accumulated in the October-2015 & April-2017 round robins. The number of results used to certify each analyte is shown in the table above.</p> <p>Material Description This material is described as a High sulphide epithermal deposit in Peru.</p> <p>Colour Designation (ISCC-NBS, SP440) This material is medium light gray in colour.</p> <p>Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.</p> <p>Preparation and Packaging 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.</p> <p>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.</p> <p>Assay Testwork 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.</p> <p>Stability This product remains stable in its original packaging, away from direct sunlight.</p> <p>Material Safety This product is not hazardous and non-toxic.</p>	<p>Antimony 8.105</p> <p>Arsenic 2520</p> <p>Barium 1014.5</p> <p>Bromine <0.534</p> <p>Cadmium 13.65</p> <p>Caesium 2.27</p> <p>Calcium (%) nr</p> <p>Cerium 15</p> <p>Chromium <20</p> <p>Cobalt 54.9</p> <p>Europium 1.1</p> <p>Gold (ppb) 4535</p> <p>Hafnium 22.65</p> <p>Iridium (ppb) <20</p> <p>Iron (%) 3.215</p> <p>Lanthanum 6.615</p> <p>Lutetium 0.282</p> <p>Mercury nr</p> <p>Molybdenum 50.1</p> <p>Neodymium nr</p> <p>Nickel 25.25</p> <p>Potassium (%) nr</p> <p>Rubidium <5.1</p> <p>Samarium 2.57</p> <p>Scandium 5.28</p> <p>Selenium <3.21</p> <p>Silver <1</p> <p>Sodium (%) 0.043</p> <p>Strontium nr</p> <p>Tantalum 0.248</p> <p>Tellurium <20</p> <p>Terbium <0.119</p> <p>Thorium 3.54</p> <p>Tin <200</p> <p>Tungsten 4.64</p> <p>Uranium 1.985</p> <p>Ytterbium 1.3</p> <p>Zinc 3725</p> <p>Zirconium <500</p>	<p>Fe 3.04</p> <p>SiO₂ 83.37</p> <p>Al₂O₃ 3.37</p> <p>TiO₂ 0.979</p> <p>MnO 0.01</p> <p>CaO 0.08</p> <p>P 0.043</p> <p>S 5.29</p> <p>MgO 0.04</p> <p>K₂O 0.329</p> <p>Na₂O 0.081</p> <p>LOI1000 6.1</p>	<p>Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.</p> <p>'nr': Not Reported</p>

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>

GBM913-5

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