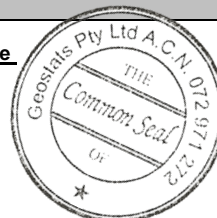


GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM321-2



Certified Control Values

Total Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	50	3	52	+/- 0.9
Copper (ppm)	1176	31	53	+/- 8.7
Zinc (ppm)	217	5	50	+/- 1.5
Lead (ppm)	19	3	48	+/- 0.9
Arsenic (ppm)	70	5	47	+/- 1.5
Cobalt (ppm)	34	1	43	+/- 0.3
Silver (ppm)	2.1	0.2	47	+/- 0.06

Partial Digest

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval
Nickel (ppm)	47	4	50	+/- 1
Copper (ppm)	1167	70	75	+/- 16.3
Zinc (ppm)	211	13	58	+/- 3.5
Lead (ppm)	17	2	49	+/- 0.7
Arsenic (ppm)	68	3	45	+/- 1
Cobalt (ppm)	33	2	52	+/- 0.5
Silver (ppm)	1.8	0.1	49	+/- 0.04

CRM Details

Control Statistic Details	Neutron Activation Analysis Results (ppm, unless otherwise noted)		Major Elements by Fusion / XRF (%)	
	Control statistics were produced from results accumulated in the April-2021 round robin. The number of results used to certify each analyte is shown in the table above.	Antimony	4.6	Fe
Material Description This material is described as an Oxide andesite, Pilbara, WA.	Arsenic	70	SiO ₂	62.37
	Colour Designation (ISCC-NBS, SP440) This material is very pale orange in colour.	Barium	175	Al ₂ O ₃
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.		Bromine	<2	TiO ₂
	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. 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.	Cadmium	<10	MnO
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.		Caesium	4	CaO
	Stability This product remains stable in its original packaging, away from direct sunlight.	Calcium (%)	nr	P
Material Safety This product is not hazardous and non-toxic.		Cerium	54	S
	CRM Details	Chromium	45	MgO
Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.		Cobalt	35	K ₂ O
	'nr': Not Reported	Europium	1	Na ₂ O
Iridium (ppb)		Gold (ppb)	18	LOH1000
	Iron (%)	Hafnium	<5	
Lanthanum		Lutetium	<50	
	Mercury	Molybdenum	6.6	
Neodymium		Nickel	28	
	Potassium (%)	Potassium (%)	0.3	
Rubidium		Rubidium	nr	
	Samarium	Samarium	<10	
Scandium		Scandium	nr	
	Selenium	Selenium	nr	
Silver		Silver	<5	
	Sodium (%)	Sodium (%)	53	
Strontium		Strontium	nr	
	Tantalum	Tantalum	67	
Tellurium		Tellurium	4.2	
	Terbium	Terbium	14.1	
Thorium		Thorium	<10	
	Tin	Tin	<2	
Tungsten		Tungsten	<20	
	Uranium	Uranium	1	
Ytterbium		Ytterbium	4.03	
	Zinc	Zinc	<200	
Zirconium		Zirconium	5	
			<2	
		1.8		
		<200		
		<500		

20 Hines Road, O'Connor, Western Australia 6163

Phone: +61 8 9314 2566 | Email: info@geostats.com.au

Website: www.geostats.com.au

GBM321-2

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