GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Geochem Base Metal Reference Material Product Code

GBM910-8

Certified Control Values



Major Elements by

Element	Grade	Standard Deviation	Num of Analyses	Confidence Interval	
Nickel (ppm)	24	14	74	+/- 3.2	
Copper (ppm)	55	9	88	+/- 2	
Zinc (ppm)	87	35	94	+/- 7.1	
Lead (ppm)	8	6	53	+/- 1.6	
Arsenic (ppm)	5	nr	nr	nr	
Cobalt (ppm)	28	13	73	+/- 3.2	
Silver (ppm)	0.7	nr	nr	nr	

CRM Details

Neutron Activation

Control Statistic Details	Analysis Results (ppm,		Fusion / XRF (%)	
Control statistics were produced from results accumulated in the October-2010	unless otherwise noted)		, ,	
round robin. The number of results used to certify each analyte is shown in the	Antimony	<0.1	Fe	8.55
table above.	Arsenic	0.444	SiO ₂	52.28
	Barium	161	Al ₂ O ₃	14.99
Material Description	Bromine	0.478	TiO ₂	1.854
This material is described as a Bunbury Basalt.	Cadmium	<5	MnO	0.17
	Caesium	<1	CaO	9.37
	Calcium (%)	nr	Р	0.088
Colour Designation (ISCC-NBS, SP440)	Cerium	23.1	S	0.047
This material is medium light gray in colour.	Chromium	180	MgO	5.26
3 3 7	Cobalt	39.5	K ₂ O	0.44
Usage	Europium	1.86	Na ₂ O	2.968
This product is for use in the mining industry as a reference material for	Gold (ppb)	<5	LOI1000	0.13
monitoring and testing the accuracy of laboratory assaying.	Hafnium	3.57		
	Iridium (ppb)	<20	Neutron Act	ivation
Preparation and Packaging	Iron (%)	8.15	Analyses ar	nd Fusion /
All CRMs are dried in an oven for a minimum of 12 hours at 110°C. The dry	Lanthanum	10.1	XRF Analyses are	
material is then pulverised to better than 75 micron (nominal mean of 45 micron)	Lutetium	0.464	single results and are	
using an air classifier. The material is then homogenised and stored in a sealed,	Mercury	nr	indicative only. These	
stable container ready for final packaging.	Molybdenum	<2	are provided for matrix	
	Neodymium	nr	identification	า
Materials are statistically sampled from stores, then packaged into either heat	Nickel	43.2	purposes.	
sealed, air tight, plastic pulp packets or screw top sealed plastic containers ready	Potassium (%)	nr		
for distribution. All packaging has been chosen to ensure minimal contamination	Rubidium	9.42	'nr': Not Reported	
from outside sources during shipment, use and storage.	Samarium	5.1		
	Scandium	32.8		
Assay Testwork	Selenium	<5		
All standards are tested thoroughly in the Geostats bi-annual laboratory survey.	Silver	1		
This involves assaying by multiple laboratories from around the world. Results are	Sodium (%)	2.26		
compiled into a comprehensive report detailing statistics for each standard. Assay	Strontium	nr		
distributions are checked and processed statistically, producing monitoring	Tantalum	0.659		
statistics for these standards. Materials are tested regularly to ensure stability and	Tellurium	<20		
homogeneity.	Terbium	1.11		
0. 1 ***	Thorium	1.67		
Stability	Tin	<100		
This product remains stable in its original packaging, away from direct sunlight.	Tungsten	<2		
Marketal Octob	Uranium	0.532		
Material Safety	Ytterbium	3.04		
This product is not hazardous and non-toxic.	Zinc	102		
	Zirconium	<500		

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