

GEOSTATS PTY LTD

Mining Industry Consultants
Reference Material Manufacture and Sales

Certified Gold Reference Material Product Code

G312-7

Certified Control Values

50 gram Fire Assay

Gold Grade 0.22 ppm
Standard Deviation 0.01 ppm
Confidence Interval +/- 0.002 ppm

Aqua Regia Digest

Gold Grade 0.22 ppm
Standard Deviation 0.02 ppm
Confidence Interval +/- 0.005 ppm



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-2012 round robin. A total of 144 fire assay results and 58 results from an aqua regia technique were used to certify this material.	Antimony	1.2	Fe
Material Description This material is described as an Oxide Gold waste.	Arsenic	0.9	SiO ₂	61.51
	Barium	440	Al ₂ O ₃	14.11
Colour Designation (ISCC-NBS, SP440) This material is light brownish gray in colour.	Bromine	1.08	TiO ₂	1.003
	Cadmium	<10	MnO	0.11
Usage This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.	Caesium	3	CaO	5.44
	Calcium (%)	nr	P	0.051
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.	Cerium	40	S	0.039
	Chromium	90	MgO	3.03
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.	Cobalt	22.9	K ₂ O	2.24
	Europium	1.3	Na ₂ O	3.398
Stability This product remains stable in its original packaging, away from direct sunlight.	Gold (ppb)	220	LOI1000	0.46
	Hafnium	3.5	Neutron Activation Analyses and Fusion / XRF Analyses are single results and are indicative only. These are provided for matrix identification purposes.	
Material Safety This product is not hazardous and non-toxic.	Iridium (ppb)	<10	"nr": Not Reported	
	Iron (%)	5.7		
	Lanthanum	24		
	Lutetium	0.4		
	Mercury	nr		
	Molybdenum	<5		
	Neodymium	nr		
	Nickel	30		
	Potassium (%)	nr		
	Rubidium	120		
	Samarium	4.3		
	Scandium	19		
	Selenium	<5		
	Silver	<1		
	Sodium (%)	2.47		
	Strontium	nr		
	Tantalum	1.2		
	Tellurium	<10		
	Terbium	0.7		
	Thorium	15		
	Tin	<100		
	Tungsten	4		
	Uranium	8		
	Ytterbium	2.57		
	Zinc	84		
	Zirconium	<200		

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