



AMIS_Documents

Doc: ADOC_091

Originator: Quality
Specialist

Approver: Managing
Director

Revision No: 000

Revision Date: 17.11.2017

Issued By: Quality Specialist

Reference Material Report

AMIS0447

Reference Material

98% Copper Standard from Namibia

Reference Material Report

AMIS

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SUMMARY STATISTICS

Informational values

Analyte	Method	Mean	Two Standard deviation (2s)	Unit
Cu	Acid digest with fusion, electroplating.	98.58	0.184	%
Au	Fire Assay gravimetric	78.04	1.12	g/t
Ag	Fire Assay gravimetric	1891	65	g/t
As	Microwave digestion	0.21	0.022	%
Pb	Microwave digestion	0.067	0.008	%

Fe and Zn were reported as <0.01 %.

1. Informational concentrations and standard deviation

AMIS0447 is a new reference material, developed in October 2018. Table 1 gives the recommended concentrations, standard deviation, and two standard deviation for the reference material.

Table 1. Informational concentrations, standard deviation and two standard deviations.

Analyte	Method	Mean	Standard deviation (s)	Two Standard deviation (2s)	% RSD	Unit
Cu	Acid digest with fusion, electroplating.	98.58	0.092	0.184	0.093	%
Au	Fire Assay gravimetric	78.04	0.56	1.12	0.720	g/t
Ag	Fire Assay gravimetric	1891	33	65	1.729	g/t
As	Microwave digestion	0.21	0.011	0.022	5.303	%
Pb	Microwave digestion	0.067	0.004	0.008	6.349	%

2. Intended Use

AMIS0447 is a Reference Material, fit for use as a control sample in routine assay laboratory quality control when inserted within runs of test samples and measured in parallel to test samples. The values quoted here are not certified.

3. Analytical and Physical Methods (Method of analysis)

- 3.1 Cu - acid digest with fusion, electroplating.
- 3.2 Ag and Au - Fire Assay, gravimetric
- 3.3 As, Fe, Pb and Zn- microwave digestion, ICP-AES.

4. Origin of Material

The material is processed Copper from Namibia.

5. Approximate Mineral and Chemical Composition

The material is >98% Copper.

6. Health and Safety

The material is a coloured Greyish Red (5R 4/2). Safety precautions for handling fine particulate matter are recommended, such as the use of safety glasses, breathing protection, gloves and a laboratory coat.

7. Method of Preparation

The material was mixed and split into 30g per glass bottle.

8. Handling

The material is packaged in 50g glass bottles that must be shaken or otherwise agitated before use.

9. Storage information

The material should be stored in a cool dry place, in such a way that it does not compromise the integrity of the CRM. The material should be stored in conditions which will ensure it does not absorb moisture.

10. Method of certification

This material has been carefully prepared and tested by a third-party independent ISO17025 accredited laboratory. The material was not submitted for interlaboratory proficiency testing.

11. Metrological Traceability

Traceability to SI units is via the standards used by the individual laboratory that did the analysis which is accredited to the ISO17025 general requirements for the competence of testing and calibration laboratories and who have maintained measurement traceability during the analytical process.

12. Period of Validity

Due to the type of material, the period of validity cannot be determined.

13. Minimum Sample Size

The recommended minimum sample sizes for the use of this material will be as per your laboratories method requirements.

14. Recommended use in Quality Control

Users should set their own limits *i.e.* 1, 2 and 3 standard deviations from an obtained mean value based on at least 10 replicate analyses using this RM.

15. Legal Notice

This report and the reference material described in it have been prepared with due care and attention. However, AMIS, a division of Torre Analytical Services (Pty) Ltd and Melesha Mungaroo accept no liability for any decisions or actions taken following the use of the reference material.

15 October 2018

Version:000

Approving Officers:

African Mineral Standards: _____

Melesha Mungaroo (Technical Project Specialist)