

Copper - Gold Concentrate

DIGESTION OF COPPER – GOLD CONCENTRATE USING COLDBLOCK™ DIGESTION TECHNOLOGY

Author: Lorie-Anne Doig and Erick Helmeczi

Introduction

This application note will focus on the digestion of Copper – Gold concentrate using ColdBlock[™] Digestion CB12L Technology.

Method

A sample of CRM (Certified Reference Material) OREAS-991 was digested using the following two methods:

- 0.25g of sample was weighed and placed into a ColdBlock[™] Digestion vessel.
- 12ml inverse Aqua Regia (1:3 HCL:HNO₃) was added.
- Sample was digested at 65% power for 15 minutes.
- Chiller temperature was set to -5°C.
- Sample was allowed to cool.
- Sample was normalized to 50 mL with 20% HCl.

or

- 30g of sample was weighed and placed into a ColdBlock[™] Digestion vessel.
- 160mL inverse Aqua Regia (1:3 HCL:HNO₃) was added.
- Sample was digested at 65% power for 15 minutes.
- Chiller temperature was set to -5°C.
- Sample was allowed to cool.
- Sample was normalized to 200mL with 20% HCl.

Instrument

ColdBlock [™] Digestion CB12L Technology.

General

This procedure is specific for the sample digested and may need modification for different samples to achieve the desired result.

CBTI-AN-004