CANADA CENTRE FOR MINERAL AND ENERGY TECHNOLOGY

REFERENCE TUNGSTEN ORE CT-1

CERTIFICATE OF ANALYSIS

Consensus Value		95% Confidence Interval
W	1.04%	±0.017%

DESCRIPTION

CT-1 is a sample of scheelite ore obtained in 1973 from Canada Tungsten Corporation, Tungsten, Northwest Territories. The major mineralogical components are 40% pyroxene, 18% quartz, 12% pyrrhotite, 10% amphibole, 8% calcite, 5% mica, 2% of each of feldspar and dolomite and 1.6% scheelite. The approximate chemical composition is:

	wt %		wt %
Fe(total)	17.5	Mn	0.7
Si	17.2	W	1.04
Ca	12.2	K	0.7
S	8.2	Na	0.2
Al	2.9	Ti	0.2
Mg	2.0	Mo	0.03
C(total)	1.7		

The ore was dry-ground to minus 74 μm, blended, sampled systematically for analysis by X-ray fluorescence and chemical methods to demonstrate homogeneity sufficient for use as a compositional reference material for tungsten, and bottled in 200-g units.

CERTIFICATION

The consensus value for tungsten is the unweighted mean of 186 accepted analytical determinations by 15 laboratories. The summary of results according to analytical method gives:

Method	No. of Laboratories	No. of Determinations	Mean Value (wt %)
Peroxide fusion*	8	84	1.04
Pyrosulphate fusion*	6	57	1.06
HF-HCl-H_3PO_4*	3	25	1.06
X-ray fluorescence	2	20	0.989

*By thiocyanate-absorptiometric procedure

LEGAL NOTICE

The Canadian Certified Reference Materials Project has prepared this reference material and statistically evaluated the analytical data of the interlaboratory certification program to the best of its ability. The Purchaser by receipt hereof releases and indemnifies the Canadian Certified Reference Materials Project from and against all liability and costs arising out of the use of this material and information.

REFERENCE

The preparation and certification procedures used for CT-1 are given in CANMET Report 76-5 "Tungsten ores CT-1, BH-1 and TLG-1: Their characterization and preparation for use as certified reference materials" which is available free of charge on request to:

Coordinator, CCRMP
CANMET
555 Booth Street
Ottawa, Ontario K1A 0G1
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This Certificate of Analysis is available in French on request to the Coordinator, CCRMP.