

REFERENCE TUNGSTEN ORE BH-1

CERTIFICATE OF ANALYSIS

Consensus Value		95% Confidence Interval
W	0.422%	±0.008%

DESCRIPTION

BH-1 is a sample of wolframite ore, hand-picked in 1973 from a stockpile at the Burnt Hill deposit near Fredericton, New Brunswick, the deposit being owned by International Paper Company Limited. The major mineralogical components are 73% quartz, 11% biotite, 5% chlorite, 4% muscovite, 2% of each of feldspar and pyrrhotite, 1% beryl and topaz and 0.4% cassiterite, rutile and apatite. The approximate chemical composition is:

	wt %		wt %
Si	38.0	Mg	0.4
Al	3.5	Ti	0.4
Fe(total)	3.2	Mn	0.2
K	1.7	Na	0.1
S	0.8	C(total)	0.1
Ca	0.5	Mo	0.02
W	0.422		

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 224 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*	7	74	0.412
Pyrosulphate fusion*	7	65	0.424
HF-HCl-H ₃ PO ₄ *	4	75	0.428
X-ray fluorescence	1	10	-

*By thiocyanate-absorptiometric finish

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 BH-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
Canada

This Certificate of Analysis is available in French on request to the Coordinator, CCRMP.