

REFERENCE IRON ORE MW-1

CERTIFICATE OF ANALYSIS

Recommended Values \pm 95% Confidence Interval			
Fe (total)	66.08	\pm	0.06%
Fe (ferrous)	1.36	\pm	0.05%
SiO ₂	4.60	\pm	0.07%
Al ₂ O ₃	0.30	\pm	0.01%
CaO	0.053	\pm	0.004%
MgO	0.032	\pm	0.003%
P	0.011	\pm	0.001%
K	0.011	\pm	0.001%

DESCRIPTION

MW-1 is a sample of iron ore concentrate from the Mount Wright deposit of Quebec Cartier Mining Company. It is essentially specular hematite with minor to trace amounts of quartz, iron silicates and ilmenite. The bulk material was passed through an 82 mesh screen, blended and bottled in 200-g units. The stock was sampled systematically for analysis for iron, silicon and titanium by X-ray fluorescence and for silicon and

sodium by chemical methods to demonstrate homogeneity sufficient for use as a compositional reference material.

CERTIFICATION

MW-1 was characterized by an interlaboratory analysis program. The recommended values are the unweighted means of the following:



	No. of laboratories	No. of sets of results	No of results
Fe (total)	13	16	104
Fe (ferrous)	9	10	74
SiO ₂	14	16	108
Al ₂ O ₃	14	15	90
CaO	12	13	84
MgO	13	15	92
P	11	12	76
K	12	13	78

NON-CERTIFIED CONSTITUENTS

The concentrations of the following constituents are given on a provisional basis only.

	No. of laboratories	No. of results	Value wt %
TiO ₂	12	86	0.13
Mn	14	106	0.016
S	12	85	0.011
Na	12	83	0.011

The concentrations of the following constituents are the mean values of 20 to 28 determinations performed by a single laboratory and are given for information only.

	Value
Cu	11 µg/g
Ni	900 µg/g
Zn	16 µg/g

INSTRUCTIONS FOR USE

MW-1 should be dried at 105°C for two hours before use.

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 MW-1 are described in CANMET Report 82-16E "MW-1: A Certified Reference Iron Ore" which is available free of charge on request to:

Coordinator, CCRMP
CANMET
555 Booth Street
Ottawa, Ontario K1A 0G1
Canada

Pour obtenir la version anglaise du présent certificat d'analyse, prière de s'adresser au coordonnateur du CCRMP.