Energy, Mines and Resources Canada

CANADA CENTRE FOR MINERAL AND ENERGY TECHNOLOGY

REFERENCE URANIUM ORE BL-5

CERTIFICATE OF ANALYSIS

	Consensus Value	95% Confidence Interval
U	7.09%	± 0.03%
Ra-226	857 Bq/g	± 38 Bq/g
Pb-210	866 Bq/g	± 21 Bq/g

DESCRIPTION

BL-5 is a low-grade concentrate from Beaverlodge, Saskatchewan. The major mineralogical components are, in decreasing order of abundance: plagioclase feldspars, hematite, quartz, calcite and dolomite, chlorite and muscovite; uraninite is the main uranium-bearing mineral. The concentrate was dried at 100°C, 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 uranium and bottled in 100-g units. Evidence is available that BL-5 is in secular equilibrium.

CERTIFICATION

The consensus value for uranium is the unweighted mean of 337 accepted analytical determinations by 24 laboratories. Methods included titrimetry, colorimetry, fluorimetry, x-ray fluorescence, neutron activation analysis, radiochemistry and isotope dilution.

LEGAL NOTICE

REFERENCE

The preparation and certification procedures used for DL-1a are given in CANMET Reports 80-10 "DL-1a: A Certified Uranium-Thorium Reference Ore", 83-9E "Radium-226 in Certified Uranium References Ores DL-1a, BL-4a, DH-1a and BL-5" and 84-11E "Lead-210 in Certified Uranium Reference Ores DL-1a, BL-4a, DH-1a and BL-5" which are available free of charge on application to:

Coordinator, CCRMP

CANMET

555 Booth Street

Ottawa, Ontario K1A OG1

Canada

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