

BL-1 to BL-4

Uranium-Thorium Ores

These four reference materials remain from a suite of six ores, from the two principal uranium-producing regions of Canada, that were prepared to replace the previous reference materials of the Canadian Uranium Producers' Analytical Subcommittee. The stocks of the other two, DH-1 and DL-1, both from the Elliot Lake region of Ontario, have been exhausted and are now replaced by DH-1a and DL-1a, respectively.

The four materials, BL-1, BL-2, BL-3, and BL-4, from the Beaverlodge area of northwestern Saskatchewan, are relatively free of thorium, are in secular equilibrium, and cover a range of concentrations that should make them useful as reference materials for radiometric methods of analysis.

A copy of CANMET Report 77-64, "Radioactive ores DH-1, DL-1, BL-1, BL-2, BL-3 and BL-4: Certified reference materials", will be provided with each order of one or more of the samples.

Recommended Values and 95% Confidence Intervals

Ore	Constituent	
	Th	U
	$\mu\text{g/g}$	wt %
BL-1	15 \pm 1	0.022 \pm 0.001
BL-2		0.453 \pm 0.005
BL-3		1.02 \pm 0.01
BL-4		0.173 \pm 0.004