

#### SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

#### STUART HUNT & ASSOCIATES, LTD. 5949 Ambler Drive Mississauga, Ontario, L4W 2K2 CANADA

Cameron Musgrave Phone: 905 602 8871

#### **CALIBRATION**

Valid To: April 30, 2024 Certificate Number: 3215.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations<sup>1, 3</sup>:

#### I. Ionizing Radiation

Parameter/Equipment	Range	$CMC^{2}(\pm)$	Comments
Radiation Protection Survey Instruments –			
<sup>137</sup> Cs Exposure (Gamma)	1 μSv/hr to 1.4 Sv/hr	5.2 % of reading	Hopewell G10-2-150
<sup>241</sup> AmBe Exposure (Neutron)	(20.6 to 1170) μSv/hr	11 % of reading	Transfer standard
Contamination Instruments	(1 to 9.9 x 10 <sup>6</sup> ) cpm	6.4 % of reading	Ludlum model 500 pulser
Pulsers	(1 to 9.999 x 10 <sup>6</sup> ) cpm, (400 to 2100) V, (-4 to 4) V pulse amplitude, (1.5 to 1.9) μs negative pulse, < 2.25 μs positive pulse	6.1 % of reading	Precision counter, multimeter with attenuator, oscilloscope

Parameter/Equipment	Range	CMC <sup>2</sup> (±)	Comments
Portable Nuclear Moisture/Density Gauges –			
Density	(1770.3 to 2695.3) kg/m <sup>3</sup> (110.5 to 168.3) lb/ft <sup>3</sup>	0.5 % of reading	Density and moisture blocks
Moisture	Up to 374.2 kg/m <sup>3</sup> Up to 23.4 lb/ft <sup>3</sup>	2.2 % of reading	

<sup>&</sup>lt;sup>1</sup> This laboratory offers commercial calibration service.

<sup>&</sup>lt;sup>2</sup> Calibration and Measurement Capability Uncertainty (CMC) is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine calibrations of nearly ideal measurement standards or nearly ideal measuring equipment. CMCs represent expanded uncertainties expressed at approximately the 95 % level of confidence, usually using a coverage factor of k = 2. The actual measurement uncertainty of a specific calibration performed by the laboratory may be greater than the CMC due to the behavior of the customer's device and to influences from the circumstances of the specific calibration.

<sup>&</sup>lt;sup>3</sup> This scope meets A2LA's *P112 Flexible Scope Policy*.



# **Accredited Laboratory**

A2LA has accredited

## STUART HUNT & ASSOCIATES LTD.

Mississauga, CANADA

for technical competence in the field of

### Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017

General requirements for the competence of testing and calibration laboratories. This laboratory also meets R205 – Specific Requirements: Calibration Laboratory Accreditation Program. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system

(refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 4th day of January 2022.

Vice President, Accreditation Services
For the Accreditation Council

Certificate Number 3215.01

Valid to April 30, 2024

Revised March 20, 2024