

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

#### R.M. WESTER AND ASSOCIATES, INC. 215 Indacom Dr. St. Peters, MO 63376

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#### **CALIBRATION**

Valid To: February 28, 2023 Certificate Number: 5886.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations<sup>1, 5</sup>:

#### I. Ionizing Radiation & Radioactivity

Parameter/Equipment	Range	CMC <sup>2, 4</sup> (±)	Comments
Radiation Protection Survey Instruments <sup>3</sup> –			
Cs-137 Air Kerma	Up to 20 mSv/hr (2000 mR/hr)	5.0 %	Geiger-Mueller tubes, scintillation detectors,
Counts per Minute	(1 to 98 500 000) cpm	0.98 cpm	semiconductor detectors, ion chambers
Environmental Survey Instruments <sup>3</sup> –			
Cs-137 Air Kerma	Up to 20 mSv/hr (2000 mR/hr)	5.0 %	Geiger-Mueller tubes, scintillation detectors,
Counts per Minute	(1 to 98 500 000) cpm	0.98 cpm	semiconductor detectors, ion chambers
Clinical Survey Instruments –			
Cs-137 Air Kerma	Up to 20 mSv/hr (2000 mR/hr)	5.0 %	Geiger-Mueller tubes, scintillation detectors,
Counts per Minute	(1 to 98 500 000) cpm	0.98 cpm	semiconductor detectors, ion chambers

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Parameter/Equipment	Range	CMC <sup>2, 4</sup> (±)	Comments
Gate Monitor/Portal Radiation Detection Instruments <sup>3</sup> –			
Cs-137 Air Kerma	Up to 20 mSv/hr (2000 mR/hr)	5.0 %	Geiger-Mueller tubes,
Counts per Minute	(1 to 98 500 000) cpm	0.98 cpm	scintillation detectors, semiconductor detectors, ion chambers
Irradiation of Personnel Dosimeters Dose Equivalent –			
Cs-137 Air Kerma	Up to 20 mSv/hr (2000 mR/hr) Up to 43.9 mGy (5000 mR)	4.9 % electric 5.3 % passive	Electronic personnel dosimeters, passive dosimeters
TLD Services –			
Cs-137 Air Kerma	Up to 20 mSv/hr (2000 mR/hr) Up to 43.9 mGy (5000 mR)	5.0 % 5.0 %	Irradiation of chips – no reading
Well Chambers for Nuclear Medicine, Verification –			
Cs-137 Co-60 Ba-133	Up to 3.7 MBq Up to 7.4 MBq Up to 500 MBq	4.1 % 0.92 % 4.4 %	Verification of nuclide identification and strength
Portable Nuclear Density Gauge –			
Soil/Asphalt Density	(110.9 to 169.3) PCF (1777 to 2712) kg/m <sup>3</sup>	1.9 PCF	Field gauges using Cs- 137 and Am-241:Be
Soil Moisture	32.96 PCF 528 kg/m <sup>3</sup>	1.4 PCF	sources with Geiger- Mueller tubes

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

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- <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>3</sup> Field calibration service is available for this calibration. Please note the actual measurement uncertainties achievable on a customer's site can normally be expected to be larger than the CMC found on the A2LA Scope. Allowance must be made for aspects such as the environment at the place of calibration and for other possible adverse effects such as those caused by transportation of the calibration equipment. The usual allowance for the actual uncertainty introduced by the item being calibrated, (e.g. resolution) must also be considered and this, on its own, could result in the actual measurement uncertainty achievable on a customer's site being larger than the CMC.
- <sup>4</sup> In the statement of CMC, percentages are to be read as percent of reading unless otherwise noted.

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<sup>&</sup>lt;sup>5</sup> This scope meets A2LA's P112 *Flexible Scope Policy*.



# **Accredited Laboratory**

A2LA has accredited

## R. M. Wester and Associates, Inc.

St. Peters, MO

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 the requirements of any additional program requirements in the «field» field. 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).

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Presented this 16th day of February 2021.

Vice President, Accreditation Services For the Accreditation Council Certificate Number 5886.01

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