

CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Radiation Safety & Control Services, Inc. 93 Ledge Road Seabrook, NH 03874

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document. The current scope of accreditation can be verified at <u>www.anab.org</u>.



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Jason Stine, Vice President

Expiry Date: 19 September 2026 Certificate Number: AC-2079

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



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Radiation Safety & Control Services, Inc.

93 Ledge Road Seabrook, NH 03874 Christofer Krueger 603-474-6722 Email: crkrueger@radsafety.com Website: www.radsafety.com

CALIBRATION

Valid to: September 19, 2026

Certificate Number: AC-2079

Ionizing Radiation

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Ionizing Radiation Exposure Rate, Dose Rate	(100 μ to 1.6) R/hr (100 μ to 1.6) rem/hr 1 μ Sv/hr to 16 mSv/hr	6 % of reading	Cs-137 Beam Source ANSI N323AB-2013 ANSI N322-1997
Integrated Exposure and Integrated Dose	Up to 16 R, 16 rem or 160 mSv	6 % of reading	
Ionizing Radiation Exposure Rate, Dose Rate	(1 m to 20 k) R/hr (1 m to 20 k) rem/hr (10 μ to 200) Sv/hr	2.7 % of reading	Cs-137 Box Source ANSI N323AB-2013 ANSI N322-1997
Integrated Exposure and Integrated Dose	Up to 200 kR, 200 krem or 2 kSv	2.7 % of reading	
Neutron Ionizing Radiation Dose Rate	(6 to 120) mrem/hr	9.2 % of reading	Plutonium-Beryllium Source, HAWK TEPC ANSI N323AB-2013, ICRP 26
Neutron Ionizing Radiation Dose Rate	(7 to 200) mrem/hr	9.4 % of reading	Plutonium-Beryllium Source, HAWK TEPC ANSI N323AB-2013, ICRP 60
Dose Rate, Exposure Rate- Electrical Simulation	10 µR/hr to 10 R/hr	3.4 % of reading	Ludlum Model 500 Pulsing Station
Count Rate Instruments- Electrical Simulation	(1 to 9.99 x 10 ⁶) cpm	3.4 % of reading	Ludlum Model 500 Pulsing Station
Alpha Detection	(0 to 1) Efficiency	10 % of reading	Alpha Standard Source- (2.2 to 5.9 x 10 ⁴) dpm
Beta Detection	(0 to 1) Efficiency	10 % of reading	Beta Standard Source-(2.8 to 4.4 x 10 ⁵) dpm





Ionizing Radiation

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Gamma Detection	(0 to 1) Efficiency	10 <mark>%</mark> of reading	Gamma Standard Source- $(4.4 \times 10^3 \text{ to } 1.7 \times 10^6) \text{ dpm}$
Radiation protection — Sealed radioactive sources — Leakage Test Alpha Sources Beta Sources	(1 x 10 ⁶ to 1) μCi	25 % of reading 44 % of reading	Tennelec LB5100 Low Background Alpha/Beta Counting System

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 (k=2), corresponding to a confidence level of approximately 95%. Notes:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2079.

Jason Stine, Vice President



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