



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005
& ANSI/NCSL Z540-1-1994

LUDLUM MEASUREMENTS INC.
501 Oak Street
Sweetwater, TX 79556
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CALIBRATION

Valid To: November 30, 2018

Certificate Number: 4084.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations¹:

I. Ionizing Radiation & Radioactivity

| Parameter/Equipment | Range | CMC ² (±) | Comments |
|---|--|----------------------|-------------------------|
| Radiation Protection Survey Instruments | | | |
| Gamma Exposure | 100 µR/hr to 800 R/hr 1 µSv/hr to 8 Sv/hr | 5 % of reading | Beam calibrator |
| Neutron Dose | (2 to 800) mRem/hr 20 µSv/hr to 8 mSv/hr | 11 % of reading | Transfer method |
| Contamination Instruments | (1 to 9.9 x 10 ⁶) cpm | 4 % of reading | Ludlum model 500 pulser |
| M 500 Series Pulser | (1 to 9.999 x 10 ⁶) cpm | 2.4 % of reading | Precision counter |

¹ This laboratory offers commercial calibration service through the service laboratory, and also provides calibration services to their own newly manufactured equipment through the new instrument laboratory.

² 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.



Accredited Laboratory

A2LA has accredited

LUDLUM MEASUREMENTS INC.

Sweetwater, TX

for technical competence in the field of

Calibration

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets the requirements of ANSI/NCCL Z540-1-1994 and 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 8 January 2009*).



Presented this 22nd day of November 2016.

A handwritten signature in black ink, written over a horizontal line.

President and CEO
For the Accreditation Council
Certificate Number 4084.01
Valid to November 30, 2018
Revised on October 15, 2018

For the calibrations to which this accreditation applies, please refer to the laboratory's Calibration Scope of Accreditation.