

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

NATIONAL CENTERS FOR ANIMAL HEALTH CALIBRATION LABORATORY 1920 Dayton Avenue Ames, IA 50010

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CALIBRATION

Valid To: June 30, 2025 Certificate Number: 2526.03

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following calibrations^{1, 3}:

I. Chemical

Parameter/Equipment	Range	CMC ² (±)	Comments
Gas Detection Monitors – CO ₂ (Carbon Dioxide)	5 %	1.0 % CO2	Certified CO2

II. Mechanical

Parameter/Equipment	Range	CMC ² (±)	Comments
Balances	Up to 21 g (> 21 to 212) g (> 212 to 500) g (> 500 to 1000) g (> 1000 to 4000) g (> 4000 to 5000) g (> 5000 to 10 000) g	0.012 mg 0.10 mg 0.88 mg 1.2 mg 3.5 mg 11 mg 1.6 g	ASTM Class 1 weights

Parameter/Equipment	Range	CMC ^{2, 5} (±)	Comments
POVA – Pipettes	(0.4 to 2.0) μL (> 2.0 to 10) μL (11 to 20) μL (21 to 50) μL (51 to 100) μL (101 to 300) μL (301 to 1000) μL (1001 to 5000) μL (5001 to 10 000) μL	0.036 μL 0.046 μL 0.049 μL 0.068 μL 0.10 μL 0.22 μL 0.65 μL 5.0 μL 14 μL	Gravimetric calibration using balances with Class 1 weights
Centrifuge – Rotation	(0 to 5120) RPM (>5120 to 20 000) RPM	2.1 RPM + 0.6 <i>R</i> 5.5 RPM + 0.6 <i>R</i>	Tachometer

III. Thermodynamics

Parameter/Equipment	Range	CMC ^{2, 4, 5} (±)	Comments
Temperature – Measuring Equipment	-80 °C (> -80 to 0) °C (> 0 to 156) °C	0.071 °C + 0.6 <i>R</i> 0.035 °C + 0.6 <i>R</i> 0.049 °C + 0.6 <i>R</i>	Fluke 1524, PRT, baths
Temperature – Measure	(-80 to 0) °C (> 0 to 156) °C	0.032 °C 0.045 °C	Fluke 1524 & PRT
	(0 to 100) °C	0.65 °C	Fluke Readout & T- Type thermocouple
	(4 to 37) °C (> 37 to 99) °C	0.056 °C 0.075 °C	Thermistor
Autoclaves – Temperature Uniformity & Temperature Accuracy	(100 to 140) °C	0.11 °C + 0.6 <i>R</i>	Data loggers

¹ This laboratory typically provides calibration service for the National Veterinary Services Laboratory and the Center for Veterinary Biologics Laboratory.

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² Calibration and Measurement Capability (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.

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³ This scope meets A2LA's P112 Flexible Scope Policy.

⁴ The type of instrument or material being calibrated is defined by the parameter. This indicates the laboratory is capable of calibrating instruments that measure or generate the values in the ranges indicated for the listed measurement parameter.

⁵ In the statement of the CMC, *R* is the resolution of the unit under test.



Accredited Laboratory

A2LA has accredited

NATIONAL CENTERS FOR ANIMAL HEALTH CALIBRATION LABORATORY

Ames, IA

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 8th day of January 2024.

Mr. Trace McInturff, Vice President, Accreditation Services For the Accreditation Council Certificate Number 2526.03

Valid to June 30, 2025

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