



International Laboratory
Assessment and Accreditation

ACCREDITED LABORATORY

ILAA has accredited

Mesa Laboratories, Inc.
Lakewood, Colorado

For technical competence in the field of

Calibration

The accreditation covers the specific testing listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO/IEC 17025 – 2005 “General Requirements for the Competence of Testing and Calibration Laboratories.” This laboratory also meets the requirements of ANSI/NCSL Z540-1-1994 and any additional program requirements. Based on a Quality and Technical assessment, a rating of 985 out of a possible 1000 points has been issued to the laboratory. For the tests to which this accreditation applies, please refer to the laboratory’s Scope of Accreditation.

Presented this 27th day of October 2006.

A handwritten signature in black ink, appearing to read "Michael A Bird".

Michael A Bird
President
Certificate Number: 1716.01
Valid to October 27, 2008



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

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Calibration

Valid to: October 27, 2008

Certificate Number: 1716.01

In recognition of the successful completion of the ILAA evaluation process, accreditation is granted to this laboratory to perform the following measurements.¹

Parameter/Equipment	Range	Best Uncertainty ^{2,3} (±)	Comments
Standard Temperature	-20 to 150 C	0.025 C	Datatrace Division
High Temperature	150 to 400 C	0.112 C	Datatrace Division
Low Temperature	-40 to 90 C	0.025 C	Datatrace Division
Relative Humidity	0 to 100 %RH non-condensing	< 1.0 RH	Datatrace Division
Pressure	0 to 40 PSIA (0 to 277 kPa)	0.03 PSIA (0.21 kPa)	Datatrace Division
	40 to 200 PSIA (277kPa to 1385 kPa)	0.025% rdg +0.02 PSIA (0.025% rdg +0.14kPa)	
Temperature	0-100 C	0.05 C	Medical
Conductivity	0 to 2 mS/cm 2 to 20 mS/cm 20 to 80 mS/cm above 80 mS/cm	+/- 0.20% of reading +/- 0.08% of reading +/- 0.20% of reading +/- 0.40% of reading	Medical
Pressure	-600 to 1600 mmHg	0.5 mmHg	Medical
	0 to 300 PSIA (0 to 2078 kPa)	0.025%rdg +0.02 psi (0.025%rdg + 0.14 kPa)	Medical
Standard Temperature	-20 to 150 C	0.025 C	Nusonics
High Temperature	150 to 400 C	0.112 C	
Sonic Velocity of liquids	500 to 1400 m/s 1400-1600 m/s 1600 - 2500 m/s	0.3 m/s 0.1 m/s 0.3 m/s	Nusonics



- 1) This laboratory offers on-site calibration services.
- 2) "Best Uncertainty" is the smallest uncertainty of measurement that a laboratory can achieve within its scope of accreditation when performing more or less routine tests of nearly ideal measurement standards of nearly ideal measuring equipment. Best uncertainties represent expanded uncertainties expressed at approximately the 95% level of confidence, usually using a coverage factor of $k = 2$. The best uncertainty of a specific test performed by the laboratory may be larger than the best uncertainty stated above due to the behavior and limitations of the customer's device, environmental conditions, and to influences due to the specific measurement method.
- 3) On-site calibration services are available for the parameters listed above. The uncertainties achievable on a customer's site can be expected to be larger than the Best Measurement Capabilities (BMC) that the accredited laboratory has been assigned as Best Uncertainty on the ILAA 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 uncertainty introduced by the item being calibrated, (e.g., resolution) must also be considered and this, on its own, could result in the calibration uncertainty being larger than the BMC.

(ILAA Certificate Number 1716.01)

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