



MICRO PRECISION CALIBRATION, INC  
 17072 Tye St, SE Suite #170  
 Monroe WA 98272  
 425-821-0902

## Certificate of Calibration

Date: Jul 30, 2019

Cert No. 551220083136907

**Customer:**

CITY OF LAKEWOOD  
 9401 LAKEWOOD DR SW  
 LAKEWOOD WA 98499

MPC Control #: DAE040022  
 Asset ID: N/A  
 Gage Type: SOUND LEVEL METER  
 Manufacturer: QUEST TECHNOLOGIES  
 Model Number: 2100  
 Size: N/A  
 Temp/RH: 68.0°F / 49.0%  
 Location: Calibration performed at MPC facility

Work Order #: STL-47780  
 Purchase Order #: 001597  
 Serial Number: DAE040022  
 Department: N/A  
 Performed By: KALLE OSTHEIMER  
 Received Condition: IN TOLERANCE  
 Returned Condition: IN TOLERANCE  
 Cal. Date: July 25, 2019  
 Cal. Interval: 12 MONTHS  
 Cal. Due Date: July 25, 2020

**Calibration Notes:**

**Test Points**

Seq.	Description	Standard	Tolerance -	Tolerance +	As Found	As Left	UOM	Result
1	A 1 kHz @ 114 dB	114.0	113.3	114.7	114.3	114.3	dB	Passed
2	A 1 kHz @ 104 dB	104.0	103.3	104.7	104.1	104.1	dB	Passed
3	A 1 kHz @ 94 dB	94.0	93.3	94.7	94.3	94.3	dB	Passed
4	A 1 kHz @ 84 dB	84.0	83.3	84.7	84.3	84.3	dB	Passed
5	C 1 kHz @ 114 dB	114.0	113.3	114.7	114.2	114.2	dB	Passed
6	C 1 kHz @ 104 dB	104.0	103.3	104.7	104.2	104.2	dB	Passed
7	C 1 kHz @ 94 dB	94.0	93.3	94.7	94.3	94.3	dB	Passed
8	C 1 kHz @ 84 dB	84.0	83.3	84.7	84.3	84.3	dB	Passed

**Standards Used to Calibrate Equipment**

I.D.	Description.	Model	Serial	Manufacturer	Cal. Due Date	Traceability #
CR0694	SOUND LEVEL CALIBRATOR	1986 OMNICAL	01611	GENRAD	Jul 31, 2019	551220081463780

Calibrating Technician:

KALLE OSTHEIMER

QC Approval:

MIKE BURROUGHS

Statements of Pass or Fail Conformance: The uncertainty of measurement has been taken into account when determining compliance with specification, as per ILAC-G8:03/2009. All measurements and test results guard banded to ensure the probability of false-accept does not exceed 2% in compliance with ANSI/NCSL Z540.3-2006.  
 The status of compliance with the acceptance criteria is reported as:  
**PASS** - Compliant with specification.  
**FAIL** - Not compliant with specification.  
**FAIL<sup>2</sup>** - The measured value is not within the acceptance limits. However, a portion of the expanded uncertainty of measurement at 95% is within the specified tolerance.  
**PASS<sup>2</sup>** - The measured value is within acceptance limits. However, a portion of the expanded uncertainty of measurement at 95% exceeds the specified tolerance.  
 The expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%, unless otherwise stated. This calibration report complies with ISO/IEC 17025:2017 and ANSI/NCSL Z540.3 Method 6-Guard Bands based on Test Uncertainty Ratio. Calibration cycles and resulting due dates were submitted/approved by the customer. Any number of factors may cause an instrument to drift out of tolerance before the next scheduled calibration. Recalibration cycles should be based on frequency of use, environmental conditions and customer's established systematic accuracy. All standards are traceable to SI through the National Institute of Standards and Technology (NIST) and/or recognized national or international standards laboratories. Services rendered include proper manufacturer's service instruction and are warranted for no less than thirty (30) days. The information on this report pertains only to the instrument identified, this may not be reproduced in part or in a whole without the prior written approval of the issuing MP Calibration Laboratory.