Certificate ID: G44822

Certificate of Calibration

Quality Calibrations, Inc.
QCI
119 Lawyers Row
Centreville, MD 21617
Phone: 877-747-3883

Device Details

Device ID: 167-007
Serial Number: G44822
Description: Rainin Pipette 200µL
Method: QPS ISO SINGLE
Test Plan: ISO 200 SC
Operator: DEBRA NEILAN

Customer: Sample Customer
Contact: Sample
Location: Street
Address: City State

Environmental Factors

Air Temperature:	21.00 °C
Barometric Pressure:	29.98 inHg
Relative Humidity:	31 %
Liquid Density:	0.99800
Air Density:	0.00120
Z Factor:	1.00306

Calibration Date: 01-Nov-2023
Calibration Type: Pipette Calibration
Status: Passed
Next Due: 31-May-2024
Interval: 6 months

Comment: N/A

Measurement Standards

Device ID	Description	Serial Number	Next Calibration
1114512406	METTLER AG 245	1114512406	30-Jun-2024
221461525	Digital Barometer	221461525	19-Apr-2024
THERMOMETER PRS	Enviro-Safe	PRS-T1	31-Mar-2025

As Calibrated

Summary Statistics				Accuracy %		Precision %		Sample Volumes (µL)				
200.0 uL	**Mean**	**SD**	**Unc. +/-**	**Actual**	**Target**	**Actual**	**Target**	**Status**	**1**	**2**	**3**	**4**	**5**
Ch 1	200.50	0.30	0.42	0.251	0.800	0.149	0.300	Passed	200.63	200.66	200.58	199.97	200.66
100.0 uL	**Mean**	**SD**	**Unc. +/-**	**Actual**	**Target**	**Actual**	**Target**	**Status**	**1**	**2**	**3**	**4**	**5**
Ch 1	100.41	0.13	0.35	0.415	1.600	0.125	0.600	Passed	100.33	100.62	100.46	100.35	100.33
20.0 uL	**Mean**	**SD**	**Unc. +/-**	**Actual**	**Target**	**Actual**	**Target**	**Status**	**1**	**2**	**3**	**4**	**5**
Ch 1	20.07	0.04	0.33	0.367	8.000	0.201	3.000	Passed	20.12	20.05	20.03	20.05	20.11

Statement of Traceability

This certificate has been issued in accordance with QCI SOP QACCRED and ISO 8655-2 Specifications. This statement certifies that this calibration has been performed with instruments and standards traceable to SI units through NIST or equivalent National Metrology Institute. This certificate shall not be reproduced except in full, without written approval of the laboratory. These results relate only to item calibrated and the results apply to sample as received. QCI uses a simple acceptance approach to the TUR. Customer is to determine if the TUR Accuracy ratio (accuracy over uncertainty) is acceptable.

ANAB ACCREDITED ISO/IEC 17025 CALIBRATION LABORATORY

Measurement Uncertainties are determined using the factor of k=2 at a 95% confidence level.

ISO 17025:2017 Certified CertificateAC 1347

Completed by: DEBRA NEILAN Debra L Neilan **Date:** November 1, 2023

Reviewed by: Nicole Simpson Nicole Simpson **Date:** November 2, 2023