



Calibration Done By : ACE Pipettes LLC, Cypress, TX

Customer Information

Customer Name: Houston Health
Address: 2250 Holcombe Blvd
City-Zip: Houston, 77030
Department: Medical Microbiology

Laboratory Test Conditions - As Left Data

Start Temp (deg. C): 21.9
Env. Pr(Kpa): 101.1
Env. Humidity(%): 45.3
Z Factor: 1.0033

Eqp Details-Pipette Multi Ch. VWR EHP(Ergo High Perf.) 8 Ch. 5-50uL

Calibration Site: Onsite
S/L No: 253824005
ID Marks: MM HIB4
Cal Interval: Yearly
Test Date: 13-Sep-2024
Due Date: 13-Sep-2025

Laboratory Test Equipment and Standards

Table with 5 columns: EID, Description, S/L No, Last Cal Date, Next Cal Due Date. Rows include RH Meter/Thermometer, Mettler Balance XP205DR, and Weight Standard.

As Left Data Status: Pass

Specification : 5 uL

Table with 9 columns: Ch. 1 to Ch. 8 and rows for Z Factor, Mean Corrected, Target, Accuracy, Inaccuracy, Accuracy Summary, SD Corrected, Precision, Imprecision, Uncertainty, and Test Summary.

Specification : 50 uL


Ch. 1 Ch. 2 Ch. 3 Ch. 4 Ch. 5 Ch. 6 Ch. 7 Ch. 8

	49.80	49.91	49.84	49.90	49.88	49.82	49.83	49.95
	49.94	49.72	49.89	49.84	49.72	49.59	49.69	50.03
	50.01	49.86	49.95	49.78	49.85	49.62	49.76	49.96
	49.87	50.04	49.86	49.83	49.87	49.71	49.70	50.02
Z Factor	1.0033	1.0033	1.0033	1.0033	1.0033	1.0033	1.0033	1.0033
Mean Corrected - uL	49.91	49.88	49.89	49.84	49.83	49.69	49.75	49.99
Target	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Accuracy (% Diff)	0.18	0.23	0.22	0.32	0.33	0.62	0.50	0.01
Inaccuracy Tolerance-Manfr. Spec (%)	<=1.6	<=1.6	<=1.6	<=1.6	<=1.6	<=1.6	<=1.6	<=1.6
Accuracy Summary	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
SD Corrected	0.09	0.13	0.05	0.05	0.07	0.10	0.06	0.04
Precision (%CV)	0.18	0.27	0.10	0.10	0.15	0.21	0.13	0.08
Imprecision Tolerance-Manfr. Spec (%)	<=0.6	<=0.6	<=0.6	<=0.6	<=0.6	<=0.6	<=0.6	<=0.6
Imprecision Summary	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Uncertainty (+/-) uL	0.41(K = 2)	0.41(K = 2)	0.41(K = 2)	0.41(K = 2)	0.41(K = 2)	0.41(K = 2)	0.41(K = 2)	0.41(K = 2)
Test Summary	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Calibration Notes:

This report serves as report toward compliance with ISO Standards and other regulatory requirements. This pipette was calibrated gravimetrically using our company internal Standard Operating Procedures. This report certifies that this pipette met the manufacturer's specification on the date shown here for the calibration date. The calibration of the balance and standard weights are traceable to NIST. The gravimetric data was measured in mg. or g. and converted to uL or mL using the correction factor from ISO 8655 Standard and accounted for density of distilled water. The Pass/Fail decision reported in this report has not been accounted for measurement uncertainty. This report shall not be reproduced except in full without written permission from our company.

Certificate ID No.	CAL-M000707	Certificate Issue Date	13-Sep-2024
EID	AM001261	Calibration Done By	Kaushika Banerjee



Kaushika Banerjee

Authorized by
Date: 13-Sep-2024