



CALIBRATION CERTIFICATE

Certificate Number: J00G8YY2KM-0

Order Number: 222-881



Customer Houston Forensic Science Center
 Jennifer O'Callaghan
 500 Jefferson St
 Houston, TX 77002-7300

Location 500 Jefferson St

Serial Number 042780009

Model VWR HIGH PERFORMANCE PIPETTOR 5000 µl

Next Service 31.Oct.2025

Service Plan Onsite: Single Channel PM, 3x5 AR

Inspection Over All Condition: No Problem Found

Preventive Maintenance: Piston cleaned and re-greased

Adjustment: No-Adjustment made

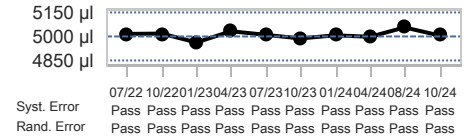
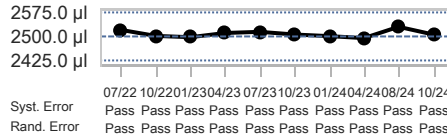
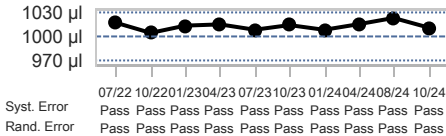
As left-Passed Steven Murray 01.Oct.2024

Conditions	Humidity	Start End 55.7 % 55.7 %	Air Temperature	Start End 19.50 °C 19.50 °C	Z-Factor	1.0029 µl/mg
	Air Pressure	1009.4 hPa 1009.4 hPa	Water Temperature	19.94 °C 19.94 °C		Evaporation
Equipment	Balance	C132316237Next Cal. (30.Nov.2024)Readability (0.0001 g)			Specification Type	Custom
	Climate Monitor	3-Wire PT100 Temperature sensor (E22152)Next Cal. (20.Dec.2024) MS5611 Pressure (E25131)Next Cal. (02.Apr.2025) SHT31 Relative Humidity (E25131)Next Cal. (02.Apr.2025) SHT31 Temperature (E25131)Next Cal. (02.Apr.2025)				Pipette Tip

Test Volume (µl)	Weighings				
	1	2	3	4	5
1000 µl	1011.4 mg	1010.1 mg	1006.7 mg	1006.6 mg	1008.1 mg
2500.0 µl	2507.3 mg	2501.7 mg	2497.4 mg	2495.3 mg	2493.3 mg
5000 µl	5001.5 mg	4984.2 mg	4989.8 mg	4979.8 mg	5004.8 mg

Test Volume (µl)	Mean Volume (µl)	Systematic Error				Random Error				Expanded Uncertainty (µl)	Status
		Error (µl)	Limit (+/- µl)	Error (%)	Limit (+/- %)	Error (µl)	Limit (µl)	Error (CV%)	Limit (%)		
		1000	1011.5	11.50	30	1.150	3	2.12	30	0.2100	3
2500.0	2506	6.25	75	0.2499	3	5.60	75	0.2236	3	16 µl (k=2.52)	Passed
5000	5006	6.50	150	0.1299	3	10.86	150	0.2168	3	32 µl (k=2.87)	Passed

As left History



Authorized Signatory, Steven Murray

01.Oct.2024

METTLER TOLEDO
 ACCREDITED LABORATORY

7500 Edgewater Drive
 Oakland, CA 94621

This calibration certificate is in accordance with ISO 8655-7:2022 and PS-125 and only applies to the item tested. Its measurements are traceable to SI through N.I.S.T. This laboratory has been accredited by A2LA for the requirements of ISO/IEC 17025:2017. The expanded uncertainty of measurement (U) is the standard uncertainty of measurement multiplied by the coverage factor k such that the coverage probability corresponds to approximately 95%. Statement of compliance is simple acceptance (see PS-126.03 for uncertainty considerations). Mettler-Toledo Rainin grants permission to reproduce this document in full only. ©2024 Mettler-Toledo Rainin, LLC.