



CALIBRATION CERTIFICATE

Certificate Number: H00G83ATZ8-0

Order Number: 222-766

RAININ
Pipetting 360°

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

Location 500 Jefferson St

Serial Number 942780372

Model VWR HIGH PERFORMANCE PIPETTOR 5000 µl

Next Service 31.Oct.2024

Service Plan Onsite: Single Channel PM, 3x5 AR

Inspection Over All Condition: Good

Preventive Maintenance: Piston cleaned and re-greased
Adjustment: No-Adjustment made

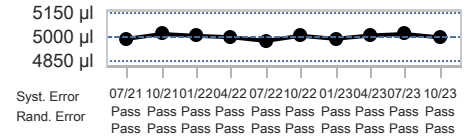
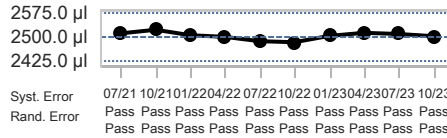
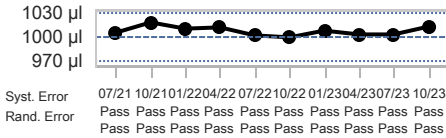
As left-Passed Steven Murray 30.Oct.2023

Conditions	Humidity 47.9 % 47.7 %	Air Temperature 20.3 °C 20.2 °C	Z-Factor 1.0030 µl/mg
	Air Pressure 1012.2 hPa 1012.2 hPa	Water Temperature 20.3 °C 20.2 °C	Evaporation 0 mg
Equipment	Balance C132316237Next Cal. (30.Nov.2023)Readability (0.0001 g)		Specification Type Custom
	Climate Monitor Bar. pressure abs. air pressure (2112149)Next Cal. (01.Dec.2023) Humidity (2112149)Next Cal. (01.Dec.2023) Temp (2112149)Next Cal. (01.Dec.2023)		Pipette Tip Customer Supplied

Test Volume (µl)	Weighings				
	1	2	3	4	5
1000 µl	1014.5 mg	1009.3 mg	1010.2 mg	1007.5 mg	1010.2 mg
2500.0 µl	2500.2 mg	2492.7 mg	2494.9 mg	2498.3 mg	2490.6 mg
5000 µl	4997.3 mg	4980.8 mg	4982.1 mg	4970.5 mg	4983.3 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	1013.4	13.37	30	1.337	3	2.58	30	0.2547	3	8.2 µl (k=2.13)	Passed
2500.0	2503	2.83	75	0.1130	3	3.95	75	0.1578	3	11 µl (k=2.32)	Passed
5000	4998	-2.25	150	-0.04503	3	9.60	150	0.1920	3	29 µl (k=2.87)	Passed

As left History



Authorized Signatory, Steven Murray
30.Oct.2023

METTLER TOLEDO
ACCREDITED LABORATORY
7500 Edgewater Drive
Oakland, CA 94621

This calibration covered by this certificate is in accordance with ISO 8655-7:2022 and PS-125. 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 reported expanded uncertainty of measurement (U) is stated as the standard uncertainty of measurement multiplied by the coverage factor k such that the coverage probability corresponds to approximately 95 %. Statement of compliance does not include the measurement of uncertainty. Mettler-Toledo Rainin LLC grants permission to reproduce this document in full only. ©2020 Mettler-Toledo Rainin, LLC