



CALIBRATION CERTIFICATE

Certificate Number: G00G8RBSCV-0

Order Number: 222-586

RAININ
Pipetting 360°

Customer Houston Forensic Science Center
Jennifer O'Callaghan
500 Jefferson St

Houston, TX 77002-7300

Location 500 Jefferson St

Serial Number 342782374

Model VWR HIGH PERFORMANCE PIPETTOR 5000 µl
Next Service Jul.2023
Service Plan Onsite: Single Channel PM, 3x5 AR

Inspection Over All Condition: Good

Preventive Maintenance: Piston cleaned and re-greased

Adjustment: No-Adjustment made

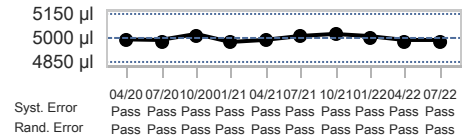
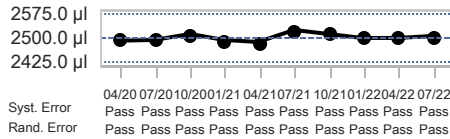
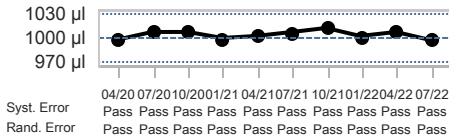
As left-Passed Steven Murray 01.Jul.2022

Conditions	Humidity	Start End 56.73 % 56.73 %	Air Temperature	Start End 20.14 °C 20.14 °C	Z-Factor	1.0029 µl/mg
	Air Pressure	1013.20 hPa 1013.20 hPa	Water Temperature	20.14 °C 20.14 °C		Evaporation
Equipment	Balance	C132316237Next Cal. (30.Nov.2022)Readability (0.0001 g)			Pipette Tip	Customer Supplied
	Climate Monitor	BP (QN400005684)Next Cal. (31.Dec.2022) Humidity - 122594359 (122594359)Next Cal. (31.Aug.2022) Temperature - 122594359 (122594359)Next Cal. (31.Aug.2022)			Specification Type	Custom

Test Volume (µl)	Weighings				
	1	2	3	4	5
1000 µl	995.7 mg	995.7 mg	991.5 mg	993.3 mg	993.8 mg
2500.0 µl	2501.1 mg	2492.0 mg	2492.8 mg	2492.8 mg	2496.9 mg
5000 µl	4967.2 mg	4964.2 mg	4950.4 mg	4971.5 mg	4970.7 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	996.9	-3.12	30	-0.3117	3	1.78	30		
2500.0	2502	2.36	75	0.09423	3	3.87	75	0.1545	3	11 µl (k=2.32)	Passed
5000	4979	-20.80	150	-0.4160	3	8.59	150	0.1724	3	26 µl (k=2.87)	Passed

As left History



Serial #



Certificate #

Authorized Signatory, Steven Murray

01.Jul.2022

METTLER TOLEDO
ACCREDITED LABORATORY

7500 Edgewater Drive
Oakland, CA 94621

This calibration covered by this certificate is in accordance with ISO 8655-6:2002 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