



CALIBRATION CERTIFICATE

Certificate Number: H00G83AT5K-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 342782374

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

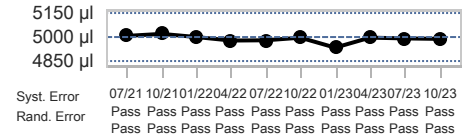
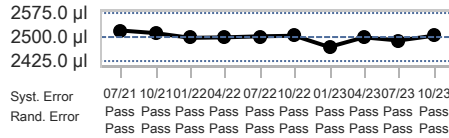
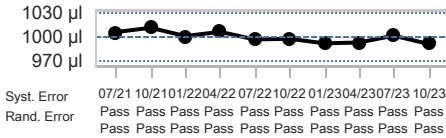
As left-Passed Steven Murray 30.Oct.2023

Conditions	Humidity	Start End 47.7 % 47.7 %	Air Temperature	Start End 20.2 °C 20.2 °C	Z-Factor 1.0029 µl/mg
	Air Pressure	1012.2 hPa 1012.2 hPa	Water Temperature	20.2 °C 20.2 °C	
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	999.7 mg	994.9 mg	994.3 mg	956.1 mg	996.9 mg
2500.0 µl	2499.9 mg	2495.7 mg	2500.3 mg	2494.6 mg	2493.4 mg
5000 µl	4970.5 mg	4969.3 mg	4982.6 mg	4962.6 mg	4983.9 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 (%)		
		(µl)	(+/- µl)	(%)	(+/- %)	(µl)	(µl)	(CV%)	(%)		
1000	991	-8.75	30	-0.8754	3	18.22	30	1.838	3	53 µl (k=2.87)	Passed
2500.0	2504.0	4.02	75	0.1608	3	3.15	75	0.1258	3	9.4 µl (k=2.21)	Passed
5000	4988	-11.80	150	-0.2359	3	9.19	150	0.1843	3	28 µl (k=2.87)	Passed

As left History



Authorized Signatory, Steven Murray
30.Oct.2023

METTLER TOLEDO
ACCREDITED LABORATORY
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Oakland, CA 94621