



CALIBRATION CERTIFICATE

Certificate Number: F00G8H6F9V-0

Order Number: 222-414

RAININ
Pipetting 360°

Customer Houston Forensic Science Center
Callan Hundl
500 Jefferson St

Houston, TX 77002-7300

Location 500 Jefferson St

Serial Number 342753263

Model VWR SIGNATURE 20-200 WITH TIP EJECTOR
Next Service Jul.2021
Service Plan Onsite: Single Channel PM, 3x5 AR

Inspection Over All Condition: Good

Preventive Maintenance: Piston cleaned and re-greased

Adjustment: No-Adjustment made

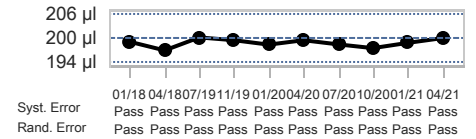
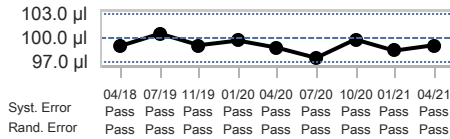
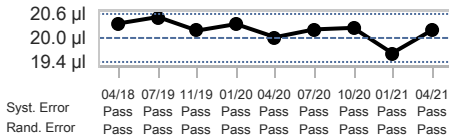
As left-Passed Steven Murray 05.Apr.2021

Conditions	Humidity	70.03 % 70.03 %	Air Temperature	17.61 °C 17.61 °C	Z-Factor	1.0024 µl/mg	
	Air Pressure	1019.98 hPa 1019.98 hPa	Water Temperature	17.61 °C 17.61 °C		Evaporation	0 mg
Equipment	Balance	B442140901Next Cal. (31.Jul.2021)Readability (0.0001 g)				Pipette Tip	Customer Supplied
	Climate Monitor	BP (QN400005684)Next Cal. (31.Dec.2021) Humidity - 200017918 (200017918)Next Cal. (10.Jan.2022) Temperature - 200017918 (200017918)Next Cal. (10.Jan.2022)				Specification Type	Custom

Test Volume (µl)	Weighings				
	1	2	3	4	5
20.0 µl	20.1 mg	20.1 mg	20.4 mg	20.2 mg	19.9 mg
100.0 µl	98.9 mg	98.8 mg	99.1 mg	98.5 mg	98.8 mg
200 µl	199.3 mg	199.2 mg	199.5 mg	199.4 mg	200.0 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 (%)		
		20.0	20.19	0.19	0.6	0.9417	3	0.18	0.6	0.9020	3
100.0	99.06	-0.94	3	-0.9428	3	0.22	3	0.2194	3	0.62 µl (k=2.52)	Passed
200	199.96	-0.04	6	-0.02062	3	0.31	6	0.1561	3	0.89 µl (k=2.65)	Passed

As left History



Authorized Signatory, Steven Murray

05.Apr.2021

METTLER TOLEDO

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