



CALIBRATION CERTIFICATE
 Certificate Number: F00G80Y5GU-0
 Order Number: 222-380



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 Apr.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

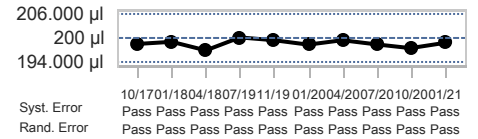
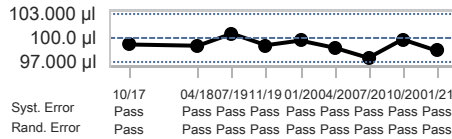
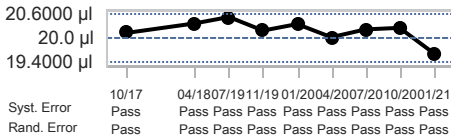
As left-Passed Steven Murray 08.Jan.2021

Conditions	Humidity	Start End 42.34 % 42.34 %	Air Temperature	Start End 19.62 °C 19.62 °C	Z-Factor	1.0028 µl/mg
	Air Pressure	1025.73 hPa 1025.73 hPa	Water Temperature	19.62 °C 19.62 °C		Evaporation
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	19.7 mg	19.5 mg	19.4 mg	19.6 mg	19.6 mg
100.0 µl	98.2 mg	98.3 mg	97.8 mg	98.0 mg	98.2 mg
200 µl	198.1 mg	197.9 mg	197.9 mg	197.9 mg	199.1 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	19.61	-0.39	0.6000	-1.926	3	0.11	0.6000		
100.0	98.37	-1.63	3.000	-1.625	3	0.20	3.000	0.2039	3	0.57 µl (k=2.43)	Passed
200	198.7	-1.27	6.000	-0.6325	3	0.52	6.000	0.2632	3	1.5 µl (k=2.87)	Passed

As left History



Authorized Signatory, Steven Murray
 08.Jan.2021



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