

PIPETTE IDENTIFICATION

Catalog Number	1153C	Customer ID	# 115
Model	MLA D-Tipper Pipette	Customer Name	J.B
Serial Number	923115	Address 1	VistaLab Technologies
Repair Number	WD21753	Address 2	2 Geneva Rd
Technician ID	H.R	City, State, Zip	Brewster NY 10509

TESTING CONDITIONS

Water Temp (°C)	20.69	Balance Model	Sartorius MSE 125P
Air Temp (°C)	21.00	Balance S/N	28301253
Rel Humidity (%)	49.60		
Barometric Press (mmHg)	751.87	Tips Used	9026
"Z" Factor	1.003	Test Method	To Deliver

TESTING INFORMATION

TESTING DATA

(measured weight = mg)	<u>Volume 1</u>
Weighing 1	400.50
Weighing 2	399.79
Weighing 3	402.01
Weighing 4	402.44
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Mean (mg)	401.19

CALIBRATION VERIFICATION RESULTS:

Mean Volume (µL)	402.39
Accuracy(%)	0.60
Precision(CV%)	0.31
Uncertainty (± µL)	1.30

PERFORMANCE SPECIFICATIONS:

Nominal Test Volume(µL)	400.00
Accuracy(± %)	1.00
Precision(± CV%)	0.30

RESULTS **FAIL**

Comments: AS-REQUESTED, UNCERTAINTY FACTORED INTO PASS/FAIL RESULTS

Performed By: H.Raghuber Title: Technician Date of Testing: 8/9/2017

VistaLab Technologies
2 Geneva Rd
Brewster NY, 10509 USA
914-244-6226
www.vistalab.com

This calibration was performed gravimetrically using equipment that is traceable through NIST to the International System of Units (SI). Testing methodology is compliant with ISO 8655. Expanded uncertainties available upon request. Accounting for the uncertainty means that a 95% confidence level, the measurement result ± the expanded uncertainty (k=2) shall be within specification limits. This calibration certificate applies only to the item described and shall not be reproduced other than in full. VistaLab Technologies is accredited to ISO/IEC 17025:2017 for calibration by PJLA, accreditation # 81996

AS-LEFT
Certificate ID: 164899

PIPETTE IDENTIFICATION

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Model	MLA D-Tipper Pipette	Customer Name	J.B
Serial Number	923115	Address 1	VistaLab Technologies
Repair Number	WD21753	Address 2	2 Geneva Rd
Technician ID	H.R	City, State, Zip	Brewster NY 10509

TESTING CONDITIONS

Water Temp (°C)	20.89	Balance Model	Sartorius MSE 125P
Air Temp (°C)	21.00	Balance S/N	28301253
Rel Humidity (%)	51.80		
Barometric Press (mmHg)	756.29	Tips Used	9026
"Z" Factor	1.0031	Test Method	To Deliver

TESTING INFORMATION

TESTING DATA

(measured weight = mg)	<u>Volume 1</u>
Weighing 1	400.71
Weighing 2	400.53
Weighing 3	400.40
Weighing 4	400.00
Weighing 5	400.32
Weighing 6	401.01
Weighing 7	400.32
Weighing 8	400.55
Weighing 9	400.74
Weighing 10	400.01
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Mean (mg)	400.46

CALIBRATION VERIFICATION RESULTS:

Mean Volume (µL)	401.70
Accuracy(%)	0.43
Precision(CV%)	0.08
Uncertainty (± µL)	0.27

PERFORMANCE SPECIFICATIONS:

Nominal Test Volume(mL)	400.00
Accuracy(± %)	1.00
Precision(± CV%)	0.30

RESULTS **PASS**

Comments: AS-REQUESTED, UNCERTAINTY FACTORED INTO PASS/FAIL RESULTS

Performed By: H.Raghebeer Title: Technician Date of Testing: 8/10/2017

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