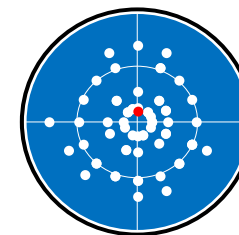


Calibration Certificate

PC10709

* As required by AS ISO/IEC 17025-2005, all measurements in this report are traceable to the International System of Units (Système international d'unités)

Calibration Data - 1 μ L									
Measurement / Channel	#1	#2	#3	#4	#5	#6	#7	#8	
1	0.98	1.01	0.98	0.99	0.99	1.01	1.01	1.01	
2	1.00	1.01	1.01	1.01	1.00	1.01	0.99	0.98	
3	0.99	0.99	1.00	1.00	1.00	1.00	0.99	1.00	
4	1.02	0.99	1.00	0.98	1.01	1.01	1.01	1.00	
Measurement / Channel	#9	#10	#11	#12	#13	#14	#15	#16	
1	1.00	1.00	1.01	1.01	1.00	0.99	1.00	1.01	
2	1.01	1.01	0.99	0.99	1.02	0.98	1.00	1.00	
3	1.01	0.98	0.99	1.00	0.99	1.01	0.99	1.00	
4	0.99	1.01	1.01	0.99	1.01	0.99	1.01	0.98	
Mean Volume (μ L)		1.00		Mean Volume (μ L)					
Inaccuracy (%)		0.24		1.06		Imprecision CV (%)			
Specification (\pm %)		2.50		1.80		Specification (\leq %)			
Status		PASS		PASS		Status			
Uncertainty (\pm μ L)		0.04				Uncertainty (\pm μ L)			



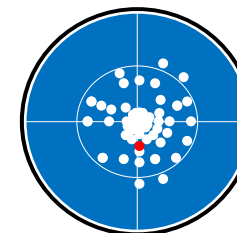
Pipette Data		Laboratory Conditions	
Pipette Manufacturer :	Capp	Water Temperature (°C)	21.1
Pipette Type :	Aero 16-K (Maxymum 30 μ L tip)	Air Pressure (hPa)	998
Volume Range :	0.5-10 μ L	Relative Humidity (%)	43
Serial Number :	BK3965	Density Correction (μ L/mg)	1.0031
Customer ID:	06944P	Calibrated with :	Sartorius ME235P auto door
Calibrated on :	30-May-2016	Calibrated by :	Mike Balac BSc (Hons) Chem

Calibration Certificate

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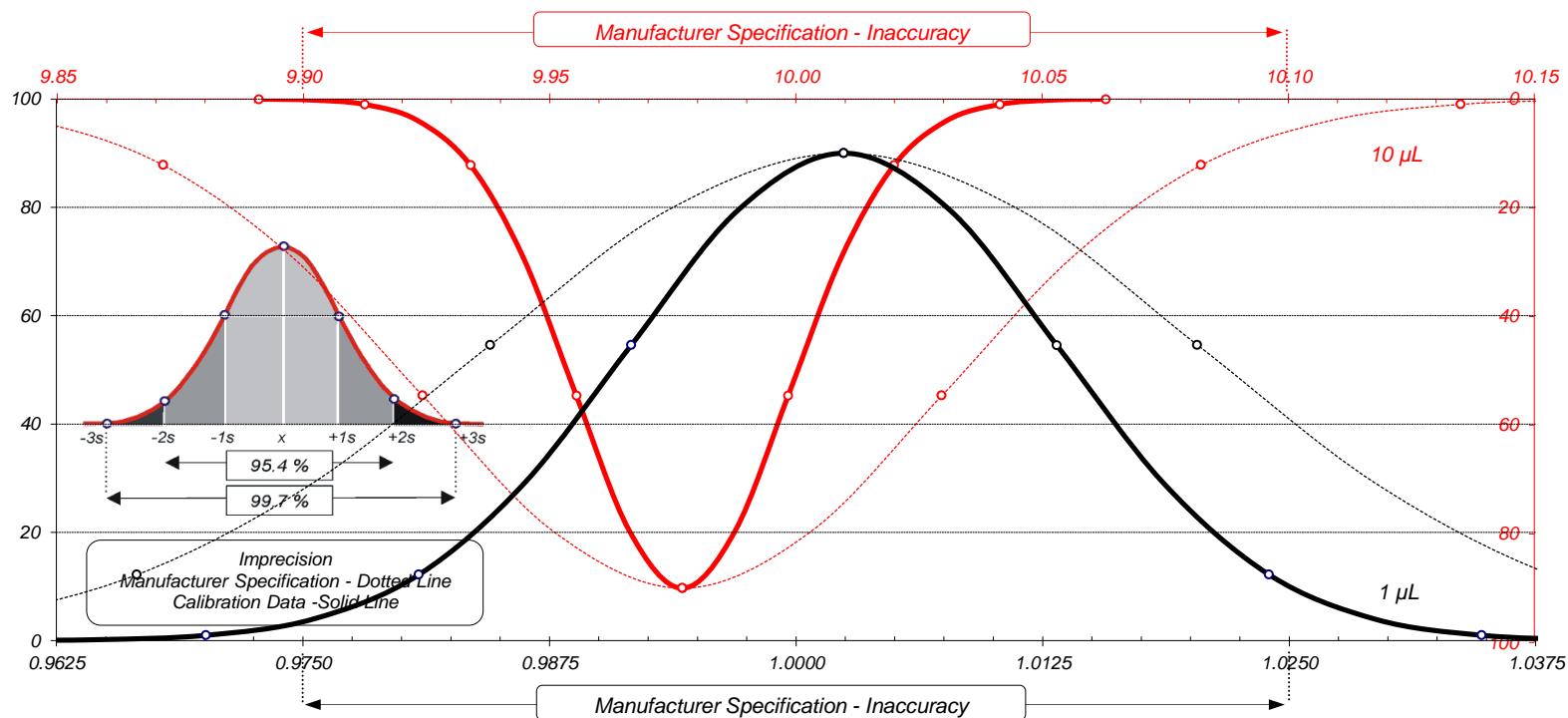
Calibration Data - 10 µL									
Measurement / Channel	#1	#2	#3	#4	#5	#6	#7	#8	
1	9.97	9.99	9.95	9.99	10.00	9.96	10.00	9.99	
2	9.96	9.98	10.00	10.02	9.95	9.97	9.98	9.95	
3	10.00	9.99	9.95	10.01	9.95	9.95	9.99	9.99	
4	9.94	9.96	9.98	10.00	9.97	9.95	9.99	9.96	
Measurement / Channel	#9	#10	#11	#12	#13	#14	#15	#16	
1	9.99	9.96	10.01	9.96	9.97	9.99	9.99	9.94	
2	9.96	9.99	9.94	9.95	9.98	9.95	9.98	9.98	
3	10.00	9.94	10.00	9.96	9.95	9.97	9.97	9.96	
4	10.01	9.99	9.97	10.01	10.01	9.98	9.95	9.96	
Mean Volume (µL)		9.98		Mean Volume (µL)					
Inaccuracy (%)		-0.23		0.22		Imprecision CV (%)			
Specification (± %)		1.00		0.50		Specification (≤ %)			
Status		PASS		PASS		Status			
Uncertainty (± µL)		0.06				Uncertainty (± µL)			



Pipette Data		Laboratory Conditions	
Pipette Manufacturer :	Capp	Water Temperature (°C)	21.1
Pipette Type :	Aero 16-K (Maxymum 30µL tip)	Air Pressure (hPa)	998
Volume Range :	0.5-10 µL	Relative Humidity (%)	43
Serial Number :	BK3965	Density Correction (µL/mg)	1.0031
Customer ID:	06944P	Calibrated with :	Sartorius ME235P auto door
Calibrated on :	30-May-2016	Calibrated by :	Mike Balac BSc (Hons) Chem

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Customer Data		Uncertainty of Measurement	
In Use At:	Pipette Clinic Pty Ltd	Coverage factor at confidence level 95 %	k=2
	48-50 George Street	(Selected volume x)	Linearity (µL)
	Parramatta NSW 2150	Accuracy (µL)	$y = 0.9972x + 0.0053$
		Accuracy + Uncertainty (µL)	$y1 = 0.9998x + 0.0440$
Test Method:	AS 2162.2-1998, ISO-8655	Uncertainty (µL)	$Ux = y1 - y$