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Hi-Tech Laboratory & Services

(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University,

Bhopal - 462 026 M.P., India Tel.: 0755 - 2410094, 4235738 Telefax.: 0755 - 2410094

Mobile: 094250 09513 web: www.htls.co.in e-mail: htlsbpt@hotmail.com / Info@htls.co.in

Accreditation Certificate No.: CC-2689 (Electro-Technical, Mechanical & Thermal Calibration)

CALIBRATION CERTIFICATE (Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

ULR CC268921100000439F		Mechanical Ca	libration Ce	rtificate Issue Date:	12.01.2021
Certificate No	Recived On	Received Condition	Calibration On	Calibration Due	Page No.
HTLS/21/BH/21.03	09.01.2021	Working	11.01.2021	10.01.2022 (As per customer requirements.)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital., C-Sector, Shahpura, Bhopal - 462016.

b. Name of Equipment /Instrument:

Micro Pipette (Variable micro Pipette)

c. Calibration Location:

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (FUC*):

Manufactured by	Type	Serial No.	Identification N	o.
Dragon Lab	Variable	YE17AAG0040946	BH/LM/PIP/07/100	-1000
Capacity (Volume)	Least Count	Calibrated Range	Declared Accuracy	Location
100 to 1000 μl	5 μl	Full Range	± 1.0 %	Q.C.

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
High Precision Digital Thermometer With RTD (PT - 100)	Yudian & Al-5600	161439299/ HTLS/DT/01	TL/020/854.1.1 CC284020000005630F	16.10.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure:

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

1	SI, No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
1	a.	μΙ	100	100.40	-0.40
T	b.	μΙ	500	505.43	-5.43
T	C.	μΙ	1000	1009.33	-9.33

Expanded uncertainty of measurement is ±0.2μl (full capacity), taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

a) Temperature:

25±2°C

b) Humidity: 50±20%

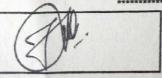
7) Calibration Status & Remark:

A Calibration Sticker has been affixed on EUC*.

b. The Micro Pipette has been calibrated and found to be within accuracy limit.

c. Refer to report before use.

Calibrated by : HEMANT OJHA Technical Manager



Approved by :

SANJAY BAIS
Quality Manager





(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University. Bhopal- 462 026 M.P., India

Tel.: 0755 - 2410094, 4235738 Telefax, : 0755 - 2410094

Mobile: 094250 09513 web; www.htls.co.in e-mail: ht/sbp/@hotmail.com / info@ht/s.co.in

b. Name of Equipment /Instrument :

ALIBRATION CERTIFICATE

JLR: CC26892110	0000437F	Mechanical Ca	libration C	Certificate Issue Date:	12.01.2021
Certificate No	Recived On	Received Condition	Calibration On	Calibration Due	Page No.
HTLS/21/BH/21.01	09.01.2021	Working	11.01.2021	10.01.2022	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital

C - Sector, Shahpura. Bhopal - 462016.

c. Calibration Location:

Micro Pipette

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Identification No. Manufactured by Type Serial No. BH/LM/PIP/03/5-50 Thermo Scientific Variable JW 06544 Location **Declared Accuracy** Calibrated Range Capacity (Volume) Least Count Q.C. ± 1.0 % Full Range 5 to 50 ul 0.1 µl

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC30822000000023F	14.07.2022
High Precision Digital Thermometer With RTD (PT - 100)	Yudian & Al-5600	161439299/ HTLS/DT/01	TL/020/854.1.1 CC284020000005630F	16.10.2021
Digital Thermo Hygrometer &	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure: Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

SI. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
2	ul	10	10.06	-0.06
h l	ul ul	20	20.28	-0.28
0.	ul ul	50	50.23	-0.23

Expanded uncertainty of measurement is ±0.20 μl (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature: a)

25±2°C

50±20% Humidity b)

7) Calibration Status & Remark:

- A Calibration Sticker has been affixed on EUC*.
- The Micro Pipette has been calibrated and found to be within accuracy limit. b.
- Refer to report before use. C

Calibrated by: HEMANT OJHA Technical Manager



Approved by :	
SANJAY BAIS	W
Quality Manager	



Accreditation Certificate No.: CC-2689 (Electro-Technical, Mechanical & Thermal Calibration)



Hi-Tech Laboratory & Services

(A House of Measurement & Calibration)

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e-mail: htlsbpt@notmail.com / info@htls.co.in

(Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

JLR : CC268920100009253F Volum Calib		20100009253F Volum Calibration Certificate Issue Date:		15.12.2020	
Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
HTLS/20/BH/894.10	12.12.2020	working	12.12.2020	11.12.2021 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital.

C - Sector, Shahpura,

Bhopal - 462 016. (M.P.)

b. Name of Equipment /Instrument:

c. Calibration Location: At Lab

Micro Pipette

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by Location Identification No. Type Serial No. CCGC QC Variable KJ11772 BH/LM/PIP/01/100-1000 Capacity (Volume) **Least Count** Calibrated Range Declared Accuracy 100-1000 µl 1 μΙ ISO:4787, ISO:8655-6 Full Range

3) Standards/ Calibrator & Measuring Equipments Used :

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Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
Precision Thermometer with pt-100 Sensor	Lutron	HTLS/DTI/01 1.183289	HTC/2020/01/797 CC247820000000797F	10.01.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure :

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/VM/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

SI. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	μΙ	100	102.46	-2.46
b.	μΙ	500	504.21	-4.21
C.	μΙ	1000	1008.74	-8.74

Expanded uncertainty of measurement is ±0.2μl (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002 Note: Scale Setting knob not lock properly & Nozzle remover knob not working Properly.

6) Environmental Condition's):

Temperature:

25±2°C

b) Humidity 50±20%

7) Calibration Status & Remark:

- A Calibration Sticker has been affixed on EUC*. a.
- The Micro Pipette has been calibrated and status report has been given. b.
- Refer to report before use. C.

*********END OF TI Calibrated by: **HEMANT OJHA Techanical Manager**

THE CERTIFICATE	1 13 1-1
Approved By :	1
SANJAY BAIS	
Quality Manager	14. 1





(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University,

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Mobile: 094250 09513 web; www.htls.co.in e-mail: httsbpt@hotmail.com / info@htts.co.in

ILR: CC268920100009734F		Volum Calibi	ration	Certificate Issue Date:	30.12.2020
Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
HTLS/20/BH/944.06	26.12.2020	working	28.12.2020	27.12.2021 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital,

Shahpura Lake,

Bhopal - 462016. (M.P.)

b. Name of Equipment /Instrument :

Micro Pipette

c. Calibration Location:

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by	Type	Serial No.	Identification No.	Location
Eppendorf	Variable	H24131J	BH/LM/PIP/08/10-100 µl	Q.C.
Capacity (Volume)	Least Count	Calibrated Range		
The second secon	0.1µl	Full Range	as per OIML, ISO: 4787:2010	

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
High Precision Digital Thermometer Nith RTD (PT - 100)	Yudian & AI-5600	161439299/ HTLS/DT/01 -	TL/020/854.1.1 CC284020000005630F	16.10.2021
Digital Thermo Hygrometer &	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure :

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 EURAMET cg-19

5) Calibration Results:

SI. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
COCKE SHILOMOS STATE	ul	10	9.69	0.31
a.	μι .	50	50.06	-0.06
D.	щ	100	100.36	-0.36

Expanded uncertainty of measurement is ±0.20μl (full capacity) , taking coverage factor K=2, corresponding to level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature:

25±2°C

Humidity 50±20% b)

7) Calibration Status & Remark:

A Calibration Sticker has been affixed on EUC*. a.

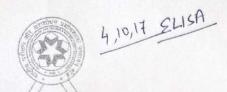
The Micro Pipette has been calibrated and found to be within accuracy limit.

Refer to report before use. C.

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Calibrated by :	1-2
HEMANT OJHA	Ar
Technical Manager	

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Hi-Tech

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Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University, Bhopai- 462 026 M.P., India

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Mobile: 094250 09513 web: www.htls.co.in e-mail: htlsbpl@hotmail.com / info@htls.co.in

Accreditation Certificate No.: CC-2689 (Electro-Technical, Mechanical & Thermal Calibration)

CALIBRATION CERTIFICATE (Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

R : CC268920100	009732F	Volum Calibr	ation	Certificate Issue Date:	30.12.2020
		Received Condition	Calibration on	Calibration due	Page No.
Certificate No	Received on		THE RESIDENCE OF THE PARTY OF T	27.12.2021	1 of 1
HTLS/20/BH/944.04	26.12.2020	working	28.12.2020	(As per customer requirements)	
-librated for:			b. Name of E	quipment /Instrument :	

1) a. Calibrated for:

M/s Bansal Hospital,

Shahpura Lake,

Bhopal - 462016. (M.P.)

c. Calibration Location:

Micro Pipette

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by	Type	Serial No.	Identification No.	Location	
Thermo Scientific	Variable	JW05244	BH/LM/PIP/04/10-100 µl	Q.C.	
Capacity (Volume)	Least Count	Calibrated Range	Declared Accu	IS MURIOUS TO THE PROPERTY OF	
Sapadid (Totality)	0.2 นโ	Full Range	as per OIML, ISO: 4787:2010		

3) Standards/ Calibrator & Measuring Equipments Used :

Standards/ Calibrator & n	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Standards Used Stainless Steel Weights	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
(E2 Class) High Precision Digital Thermometer With RTD (PT - 100)	Yudian & Al-5600	161439299/ HTLS/DT/01	TL/020/854.1.1 CC284020000005630F	16.10.2021
Digital Thermo Hygrometer &	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure:

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 **EURAMET cg-19**

5) Calibration Results:

Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
ul	10	10.06	-0.06
ul	50	50.24	-0.24
ш	100	100.43	-0.43
	Unit	Unit μ pippet at 25°C μl 10 μl 50	Unit μ pippet at 25°C μ pippet at 25°C (Average) μl 10 10.06 μl 50 50.24 100 43

Expanded uncertainty of measurement is ±0.20μl (full capacity) , taking coverage factor K=2, corresponding to level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature: a)

25±2°C

b) Humidity 50±20%

7) Calibration Status & Remark:

- A Calibration Sticker has been affixed on EUC*. a.
- The Micro Pipette has been calibrated and found to be within accuracy limit. b.
- Refer to report before use. C.

******END OF THE CERTIFICATE*********

Calibrated by :	Cexhl-
HEMANT OJHA	7 8 9
Technical Manager	

E CERTIFICATE	11
Approved by :	1/1
SANJAY BAIS	W
Quality Manager	1,



Accreditation Certificate No.: CC-2689 (Electro-Technical, Mechanical & Thermal Calibration)



Hi-Tech Laboratory & Services

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CALIBRATION CERTIFICATE

(Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

JLR : CC268921100000441F		Mechanical Ca	libration	Certificate Issue Date:	12.01.202
Certificate No	Recived On	Received Condition	Calibration Or	Calibration Due	Page No.
HTLS/21/BH/21.05	09.01.2021	Working	11.01.2021	10.01.2022 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital

C - Sector, Shahpura, Bhopal - 462016, b. Name of Equipment /Instrument :

Micro Pipette

c. Calibration Location:

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by	Туре	Serial No.	Identification N	o
Eppendorf	Variable	H48623J	BH/LM/PIP/10/	10
Capacity (Volume)	Least Count	Calibrated Range	Declared Accuracy	Location
0.5 to 10 μl	0.1 μΙ	Full Range	± 1.0 %	Q.C.

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
High Precision Digital Thermometer With RTD (PT - 100)	Yudian & Al-5600	161439299/ HTLS/DT/01	TL/020/854.1.1 CC284020000005630F	16.10.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure :

5) Calibration Results:

SI, No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	μΙ	2	2.01	-0.01
b.	μΙ	5	5.04	-0.04
C.	μΙ	10	10.08	-0.04

Expanded uncertainty of measurement is $\pm 0.20~\mu l$ (full capacity), taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

a) Temperature:

25±2°C

b) Humidity 50±20%

7) Calibration Status & Remark:

- a. A Calibration Sticker has been affixed on EUC*.
- b. The Micro Pipette has been calibrated and found to be within accuracy limit.
- Refer to report before use.

*******END OF THE CERTIFICATE*******

Calibrated by :	/ DM
HEMANT OJHA	
Technical Manager	

	11	
Approved by :	1/1/	
SANJAY BAIS		
Quality Manager	N/	



Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University, Bhopal- 462 026 M.P., India

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CALIBRATION CERTIFICATE

		Volum Calibr	ation	Certificate Issue Date:	30.12.2020
Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
TLS/20/BH/944.02	26.12.2020	working	28.12.2020	27.12.2021 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital, C - Sector, Shahpura, Bhopal - 462 016. (M.P.) b. Name of Equipment /Instrument :

Micro Pipette

c. Calibration Location: At Lab

of Equipments / Instruments Under Calibrations (EUC*):

2) D	escription & Identification	n of Equipments	instruments ond	ar Cambrations (LOO).
	Manufactured by	Type	Serial No.	Identification No.
	Eppendorf	Variable	G29995G	BH/LM/PIP/11/0.5-10 μl
	Capacity (Volume)	Least Count	Calibrated Range	Declared Accuracy
F	0.5 to 10 µl	0.1 μl	Full Range	ISO:4787, ISO:8655-6

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
Precision Thermometer with pt-100 Sensor	Lutron	HTLS/DTI/01 I.183289	HTC/2020/01/797 CC247820000000797F	10.01.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle / Methodology of Calibration & Procedure:

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/µP/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

Sl. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	Щ .	2.0	2.00	0.00
b.	ul	5.0	5.00	0.00
C.	μΙ	10.0	10.01	-0.01

Expanded uncertainty of measurement is ±0.2µl (full capacity), taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature:

25±2°C

Humidity b)

50±20%

7) Calibration Status & Remark:

- A Calibration Sticker has been affixed on EUC*. a.
- The Micro Pipette has been calibrated and found to be within accuracy limit. b.
- Refer to report before use. Under NABL scope above 10 μl .

*******END OF THE CERTIFICATE*******

Calibrated by: HEMANT OJHA **Techanical Manager** Approved By: SANJAY BAIS **Quality Manager**



6, 12,13 - MM



Hi-Tech Laboratory & Services

(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University. Bhopal- 462 026 M.P., India

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PAGREL Accreditation Certificate No.: CC-2689 (Electro-Technical, Mechanical & Thermal Calibration)

CALIBRATION CERTIFICATE

(Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

LR : CC26892110	0000440F	Mechanical Ca	libration	Certificate Issue Date:	12.01.2021
Certificate No	Recived On	Received Condition	Calibration O	n Calibration Due	Page No.
HTLS/21/BH/21.04	09.01.2021	Working	11.01.2021	10.01.2022	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital., C-Sector, Shahpura, Bhopal - 462016,

b. Name of Equipment /Instrument:

Micro Pipette (Variable micro Pipette)

c. Calibration Location:

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by	Туре	Serial No.	Identification I	No.
Dragon Lab	Variable	YE17AAG0040521	BH/LM/PIP/06/20-200	
Capacity (Volume)	Least Count	Calibrated Range	Declared Accuracy	Location
20 to 200 μl	1 μΙ	Full Range	± 1.0 %	Q.C.

3) Standards/ Calibrator & Measuring Equipments Used :

BBT/023/Jul/20 14.07.2022 ULR:CC308220000000023F TL/020/854.1.1 16.10.202
TL/020/854 1 1 16 10 202
CC284020000005630F
2 HTC/2020/11/17743 06.11.202 CC247820000017743F

4) Principle /Methodology of Calibration & Procedure:

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 & EURAMET cq-19

5) Calibration Results:

Sl. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	μΙ	20	20.32	-0.32
b.	μΙ	100	100.86	-0.86
C.	μΙ	200	201.54	-1.54

Expanded uncertainty of measurement is ±0.2μl (full capacity), taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature:

25±2°C

b) Humidity 50±20%

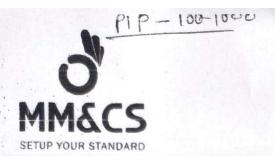
7) Calibration Status & Remark:

- A Calibration Sticker has been affixed on EUC*. a.
- b. The Micro Pipette has been calibrated and found to be within accuracy limit.
- C. Refer to report before use.

******END OF THE CERTIFICATE*********

Calibrated by: HEMANT OJHA **Technical Manager**

Approved by :	11
SANJAY BAIS	1/1
Quality Manager) V



BH/LM/P18/13/100-1000

MICRO MEASUREMENT & CALIBRATION SYSTEM

(An ISO 9001 Certified & NABL Accredited Laboratory)

Off. Address: 1159, Sudama Nagar, Near Gurudwara, Indore-452 009 (M.P.) Lab Address: RH-51, Type 2, Satyamitra Rajlaxmi Nature, Gram Rangwasa, Indore

Mob.: 9770229927, 9770234756

Email: customersupport@mmcs.co.in info@mmcs.co.in

Web : www.mmcs.co.in

CALIBRA	TION	CERT	FIC	ATE

Calibration Certificate Number/ULR Number	20/04/BH/MECH/003 Issue Date: 20/04/2		
Customer Name Address of the Customer	M/s, Bansal Hospital. Shahpura Bhopal (M.P.)462016		
SRF No.: 20/APR/053	Job No.: 20/APR/063		
Environmental Conditions	Temperature: (25±3)°C Humidity: (50±15) %RH		
Location (Site/ Lab)	Lab		
Procedure for Calibration	MM&CS/MECH/CAL/018		
Certificate Format Number	MM&CS/QF/7:8/01		

Description of the Instrument/ Unit under Calibration (UUC)

Nomenclature	Micro Pipette	Resolution	1 μΙ
Unique Identification	BH/CL/PPT/03	Acceptance Criteria (±)	NA
Sr. No.	Q38941F	Date of Receipt	18/04/2020
lake	EPPENDORF	Date of Calibration	19/04/2020
-√lodel No.	NA .	Next Calibration Due	19/04/2021
Range of Instrument	100 to 1000 μl	Condition of UUC Received	OK
Calibration Range	100 to 1000 µl.	Location of Instrument	LAB

Description of Standard Reference Instrument Used

Nomenclature	Make/Model No.	ID No./ Serial No.	Certificate No.	Valid Up To
Weight Box		MM&CS/WB/08	PPM/WB/8817/1	07/02/2023
1/10 DIN RTD with Indicator	Tempsens	MM&CS/DINI/02	CC284019000006012F	27/08/2020

Calibration Results

Sr. No.	Set Volume of UUC (µI)	Actual Volume (µI)	Deviation (Error) (µl)
01	100	99.86	0.14
02	500	599.75	0.25
03	1000	999.59	0.41

Description	Calibrated By	Reviewed & Approved By	For Stamp
Name:	Mr. Chandramani Verma	Mr. Ashish Sharma	
signation:	Sr. Calibration Engineer	Managing Director	ENT AND C
Sign:	C.8.V	- Ethila	INDORE OF THE PROPERTY OF THE

End Of The Calibration Certificate (Page 1 of 1)...



MICRO MEASUREMENT & CALIBRATION SYSTEM

(An ISO 9001 Certified & NABL Accredited Laboratory)

Off. Address: 1159, Sudama Nagar, Near Gurudwara, Indore-452 009 (M.P.) Lab Address : RH-51, Type 2, Satyamitra Rajlaxmi Nature, Gram Rangwasa, Indore

Mob.: 9770229927, 9770234756

Email: customersupport@mmcs.co.in info@mmcs.co.in

Web : www.mmcs.co.in

CALIBRATION C	ERTIFICATE
---------------	------------

Calibration Certificate Number/ULR Number	20/04/BH/MECH/002	NAME OF TAXABLE PARTY OF TAXABLE PARTY OF TAXABLE PARTY.	I to a section of
Customer Name Address of the Customer	M/s, Bansal Hospital. Shahpura Bhopal (M.P.)462016 Job No.: 20/APR/063 Temperature: (25±3)°C Lab MM&CS/MECH/CAL/018 MM&CS/QF/7.8/01		
SRF No.: 20/APR/063			
Environmental Conditions			
Location (Site/ Lab)			
Procedure for Calibration			
Certificate Format Number			

Description of the Instrument/ Unit under Calibration (UUC)

Nomenclature		Campration (OOC)	
	Micro Pipette	Resolution	0.1 山
Unique Identification	BH/CL/PPT/02	Acceptance Criteria (±)	NA NA
Sr. No. Vake	Q32920F	Date of Receipt	18/04/2020
Model No.	EPPENDORF.	Date of Calibration	19/04/2020
Range of Instrument	NA 10 to 100 ul	Next Calibration Due	19/04/2021
Calibration Range	10 to 100 μl 10 to 100 μl	Condition of UUC Received	ОК
- state	Description of State	Location of Instrument	LAB

Description of Standard Reference Instrument Used

Nomenclature	Make/Model No.			
Maight Day	telake/Model No.	ID No./ Serial No.	Certificate No.	Valid Up To
Weight Box		MM&CS/WB/08	PPM/WB/8817/1	-
1/10 DIN RTD with Indicator	Tempsens	MM&CS/DINI/02	TO THE PARTY OF TH	07/02/2023
	C-III		CC284019000006012F	27/08/2020

Sr. No.	C-AV-1	Calibration Results	
	Set Volume of UUC (µI)	Actual Volume (µI)	Deviation (Error) (µl)
01	10.00	9.97	
02	50.00	4.89	0.03
03	100.00	7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0.11
	100.00	99.84	0.16

Calibrated By	Reviewed 9 A I P	
		For Stamp
Sr. Calibration Engineer	Managing Director	SENT AND CO.
C. P. V	-tX.w.	INDORE)
	15mm	COOM + Wales
	Calibrated By Mr. Chandramani Verma Sr. Calibration Engineer	Mr. Chandramani Verma Mr. Ashish Sharma

End Of The Calibration Certificate (Page 1 of 1)...

2,5,9,14 KNA

MABL ACCREDITED LABORATORY



Hi-Tech Laboratory & Services (A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University, Bhopal- 462 026 M.P., India

Tel.: 0755 - 2410094, 4235738 Telefax.: 0755 - 2410094

Mobile: 094250 09513 web: www.htls.co.in e-mail: htlsbpl@hotmail.com / info@htls.co.in

CALIBRATION CERTIFICATE

(Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

		Volum Calibr	ation	Certificate Issue Date:	15.12.2020
Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
HTLS/20/BH/894.08	12.12.2020	working	12.12.2020	11.12.2021 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital, C - Sector, Shahpura, Bhopal - 462 016. (M.P.)

b. Name of Equipment /Instrument:

Micro Pipette

c. Calibration Location: At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by	Type	Serial No.	Identification No.	Location
	Variable	299504	BH/LM/PIP/02/0,5-10	Q.C.
Capacity (Volume)	Least Count	Calibrated Range	Declared Accura	ncy
0.5 to 10 μl	0.1 μΙ	Full Range	ISO:4787, ISO:8655-6	

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
Precision Thermometer with	Lutron	HTLS/DTI/01 1.183289	HTC/2020/01/797 CC24782000000797F	10.01.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure:

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

SI. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	μΙ	5.0	4.97	0.03
b.	μΙ	10.0	9.88	0.12

Expanded uncertainty of measurement is ±0.2μl (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature:

25±2°C

b) Humidity 50±20%

7) Calibration Status & Remark :

- A Calibration Sticker has been affixed on EUC*. a.
- The Micro Pipette has been calibrated and found to be within accuracy limit. b.
- Refer to report before use. Under NABL scope above 10 μl . C.

********END OF

Calibrated by : HEMANT OJHA Techanical Manager

1	THE CERTIFICATE*******	
	Approved By :	
	SANJAY BAIS	
	Quality Manager	



(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University, Bhopal- 462 026 M.P., India

Tel.: 0755 - 2410094, 4235738 Telefax.: 0755 - 2410094 Mobile: 094250 09513 web; www.htls.co.in e-mail: httsbpl@hotmail.com / info@htls.co.in

CALIBRATION CERTIFICATE

(Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

			Volum Calibra	ation	Certificate Issue Date:	30.12.2020
1	Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
	HTLS/20/BH/944.01	26.12.2020	working	28.12.2020	27.12.2021 (As per customer requirements)	1 of 1

) a. Calibrated for:

M/s Bansal Hospital, C - Sector, Shahpura, Bhopal - 462 016. (M.P.) b. Name of Equipment /Instrument :

Micro Pipette

c. Calibration Location : At Lab

Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Description & Identificati	on of Equipments		Identification No.
Manufactured by	Type	Serial No.	
Eppendorf	Variable	H47606J	BH/LM/PIP/05/2-20 μl
Capacity (Volume)	Least Count	Calibrated Range	Declared Accuracy
2 to 20 µl	0.02 μl	Full Range	± 1.0 %

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
(E2 Class) Precision Thermometer with	Lutron	HTLS/DTI/01 I.183289	HTC/2020/01/797 CC247820000000797F	10.01.2021
pt-100 Sensor Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure :

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

Sl. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
2	ul	5	4.99	0.01
a.	ııl	10	10.05	-0.05
D.	lu lu	20	20.23	-0.03

Expanded uncertainty of measurement is $\pm 0.20~\mu l$ (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95% .

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

a) Temperature:

25±2°C

b) Humidity 50±20%

7) Calibration Status & Remark :

a. A Calibration Sticker has been affixed on EUC*.

b. The Micro Pipette has been calibrated and found to be within accuracy limit.

c. Refer to report before use. Under NABL scope above 10 µl

******END OF THE CERTIFICATE*********

Calibrated by :
HEMANT OJHA
Techanical Manager

r		
1	Approved By :	
	SANJAY BAIS	
1	Quality Manager	





(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vinar, Opp. Barkatullah University, Bhopal- 462 026 M.P., India

Tel.: 0755 - 2410094, 4235738 Telefax.: 0755 - 2410094

Mobile: 094250 09513 web: www.htls.co.in e-mail: ht/sbpi@hotmail.com / info@ht/s.co.in

CALIBRATION CERTIFICATE (Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

JLR: CC268921100000438F		Mechanical Ca	libration	Certificate Issue Date:	12.01.2021
Certificate No	Recived On	Received Condition	Calibration O	n Calibration Due	Page No.
HTLS/21/BH/21.02	09.01.2021	Working	11.01.2021	10.01.2022 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital., C-Sector, Shahpura, Bhopal - 462016,

F. D. CC2C0024400000420F

b. Name of Equipment /Instrument:

Micro Pipette (Variable micro Pipette)

c. Calibration Location:

At Lab

2) Description & Identification of Equipments / Instruments / Under Calibrations (FUC*):

Manufactured by	Type	Serial No.	Identification N	lo.	
LCGC	Variable	KJ11436	BH/LM/PIP/09/20	9/20-200	
Capacity (Volume)	Least Count	Calibrated Range	Declared Accuracy	Location	
20 to 200 μl	0.2 ul	Full Range	± 1.0 %	Q.C.	

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./hD.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
High Precision Digital Thermometer With RTD (PT - 100)	Yudian & Al-5600	161439299/ HTLS/DT/01	TL/020/854.1.1 CC284020000005630F	16.10.2021
Digital Thermo Hygrometer &	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle / Methodology of Calibration & Procedure: Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

SI, No.	Unit -	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	щ	20	20.36	-0.36
b.	ш	100	100.48	-0.48
C.	μΙ	200	200.88	-0.88

Expanded uncertainty of measurement is ±0.2μl (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature: a)

25±2°C

b) Humidity 50±20%

7) Calibration Status & Remark:

- A Calibration Sticker has been affixed on EUC*.
- The Micro Pipette has been calibrated and found to be within accuracy limit. b.
- Refer to report before use. C.

*******END OF THE CERTIFICATE******

Calibrated by :	(IXI)
HEMANT OJHA	
Technical Manager	

Approved by :	
SANJAY BAIS	
Quality Manager	1, 0





(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University, Bhopal- 462 026 M.P., India

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Mobile: 094250 09513 web: www.htls.co.in e-mail: htlsbpl@hotmail.com / info@htls.co.in

CALIBRATION CERTIFICATE

(Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

ULR: CC268920100009733F		Volum Calibration Certificate Is		Certificate Issue Date:	30.12.2020
Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
HTLS/20/BH/944.05	26.12.2020	working	28.12.2020	27.12.2021 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital,

Shahpura Lake,

Bhopal - 462016. (M.P.)

b. Name of Equipment /Instrument :

Micro Pipette

(Variable micro Pipette)

c. Calibration Location:

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by	Type	Serial No.	Identification No.	Location
Thermo Scientific	VARIABLE	JW06250	BH/LM/PIP/14/100-1000 μί	Q.C.
Capacity (Volume)	Least Count	Calibrated Range		But and the second of the seco
100- 1000 ul	1 ul	Full Range	as per OIML, ISO: 478	37:2010

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
High Precision Digital Thermometer With RTD (PT - 100)	Yudian & Al-5600	161439299/ HTLS/DT/01	TL/020/854.1.1 CC284020000005630F	16.10.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

4) Principle /Methodology of Calibration & Procedure :

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 8655-6:2002 & EURAMET cg-19

5) Calibration Results:

SI, No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	Ш	100	98.45	1.55
6	ul	500	501.38	-1.38
C.	ul	1000	1004.97	-4.97

Expanded uncertainty of measurement is ±0.2μl (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95% .

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

a) Temperature:

25±2°C

b) Humidit 50±20%

7) Calibration Status & Remark:

- a. A Calibration Sticker has been affixed on EUC*.
- The Micro Pipette has been calibrated and found to be within accuracy limit.
- Refer to report before use.

Calibrated by :

HEMANT OJHA
Technical Manager

Approved by :

SANJAY BAIS
Quality Manager





(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University, Bhopal- 462 026 M.P., India

Tel.: 0755 - 2410094, 4235738 Telefax.: 0755 - 2410094 Mobile: 094250 09513 web; www.htls.co.in

e-mail: htlsbpl@hotmail.com / info@htls.co.in

ION CERTIFICATE (Form No. HTLS/QF/7.8.1/01 (Amendment No. 00 Dated 1st January 2020)

JLR: CC26892010	0009731F	Volum Calibr	ration	Certificate Issue Date:	30.12.2020
Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
HTLS/20/BH/944.03	26.12.2020	working	28.12.2020	27.12.2021 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital,

Shahpura Lake,

Bhopal - 462016. (M.P.)

b. Name of Equipment /Instrument :

Micro Pipette

Fixed

c. Calibration Location:

At Lab

2) Description & Identification of Equipments / Instruments Under Calibrations (EUC*):

Manufactured by	Type	Serial No.	Identification No.
	FIXED	13615094	BH/LM/PIP/15/145 μl
Capacity (Volume)	Least Count	Calibrated Range	Declared Accuracy
145 ul	PROFESSIONAL PROFESSION OF STATEMENT AND STA	Full Range	as per OIML, ISO: 4787:2010

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used	Make	Sr.No./I.D.No.	Traceability Certificate No.	Validity
Stainless Steel Weights (E2 Class)	1mg to 200g	BWB/E2/01	BBT/023/Jul/20 ULR:CC308220000000023F	14.07.2022
Precision Thermometer with pt-100 Sensor	Lutron	HTLS/DTI/01 I.183289	HTC/2020/01/797 CC247820000000797F	10.01.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	HTC/2020/11/17743 CC247820000017743F	06.11.2021

The Standards used for calibration were calibrated by using reference standard traceable to National Standard

4) Principle / Methodology of Calibration & Procedure:

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 4787:2010 & EURAMET cg-19

5) Calibration Results:

SI. No.	Unit	Nominal Capacity of μ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
a.	μΙ	145	146.9	-1.94

Expanded uncertainty of measurement is ±0.2μl (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature: a)

25±2°C

Humidity 50±20% b)

7) Calibration Status & Remark:

- A Calibration Sticker has been affixed on EUC*. a.
- The Micro Pipette has been calibrated and found to be within accuracy limit. b.
- Refer to report before use. C.

*********END OF 1 Calibrated by: HEMANT OJHA **Techanical Manager**

1	HE CERTIFICATE*******	
	Approved By :	
	SANJAY BAIS	
	Quality Manager	5.5





(A House of Measurement & Calibration)

Shivani Complex, C-4, Vidya Vihar, Opp. Barkatullah University, Bhopal- 462 026 M.P., India

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Mobile: 094250 09513 web: www.htls.co.in e-mail: htlsbpl@hotmail.com / info@htls.co.in

CALIBRATION CERTIFICATE

ULR: CC268920100	009735F	Volum Calibration		Certificate Issue Date:	30.12.2020
Certificate No	Received on	Received Condition	Calibration on	Calibration due	Page No.
HTLS/20/BH/944.07	26.12.2020	working	28.12.2020	27.12.2021 (As per customer requirements)	1 of 1

1) a. Calibrated for:

M/s Bansal Hospital,

Shahpura Lake,

Bhopal - 462016. (M.P.)

b. Name of Equipment /Instrument :

Micro Pipette

Fixed

c. Calibration Location:

At Lab

tification of Equipments / Instruments Under Calibrations (EUC*): 2)

ion of Equipments	s / Instruments Unde	Identification No	Location
Type	Serial No.	IOGIIIII IOSII IO	Q.C.
FIXED	13585616		AND RESIDENCE PROPERTY OF
Least Count	Calibrated Range		
	Full Range	as per OIML, ISO: 47	87:2010
	Type FIXED Least Count	Type Serial No. FIXED 13585616 Least Count Calibrated Range Full Range	FIXED 13585616 BH/LM/PIP/16/280 Least Count Calibrated Range Declared Accurrance as per OIML, ISO: 476

3) Standards/ Calibrator & Measuring Equipments Used :

Standards Used Standards Used 1	Make	Sr.No./I.D.No. BWB/E2/01	BBT/023/Jul/20	14.07.2022
Stainlass Steel Weights 1	ma to 200a			
Stainless Steel Weights 1mg to 200g	mg to 2009	BAARIES101*	ULR:CC308220000000023F	
E2 Class)		1011000001	TL/020/854.1.1	16.10.2021
tigit i tooloid. Digital	dian & AI-5600	161439299/ HTLS/DT/01	CC284020000005630F	
With RTD (PT - 100)		(part)	HTC/2020/11/17743	06.11.2021
Digital Thermo Hygrometer & Barometer	Lutron	HTLS/HM/02 AG-42361	CC247820000017743F	

4) Principle /Methodology of Calibration & Procedure :

Methodology adopted for Calibration is as per HTLS Procedure NO.HTLS/CP/μP/01 , As per ISO : 4787:2010 & EURAMET cg-19

5) Calibration Results:

Si. No.	Unit	Nominal Capacity of µ pippet at 25°C	Observed Capacity of μ pippet at 25°C (Average)	Deviation
9	ul	280	279.87	0.13

Expanded uncertainty of measurement is ±0.2μl (full capacity) , taking coverage factor K=2, corresponding to a level of confidence of at approx 95%.

The values have been rounded off as per IS:2-1960(wherever applicable).

Z correction factors (Temperature and Air pressure) have been applied as per ISO:8655-6:2002

6) Environmental Condition's):

Temperature:

25±2°C

Humidity 50±20% b)

7) Calibration Status & Remark:

A Calibration Sticker has been affixed on EUC*. a.

The Micro Pipette has been calibrated and found to be within accuracy limit. b.

Refer to report before use. C.

******END OF THE CERTIFICATE********

Calibrated by :	(A)
HEMANT OJHA	(A A'
Technical Manager	

Approved by :	
SANJAY BAIS	
Quality Manager	