

				CAL	.IBRA	TIO	N CERT	IFIC.	ATE			
CERI	IFICATE N	10: SB	S/CL/23/	14205			ME	DICAL D	EVICES	Page No:1 of 1		
Issue	Date					07-1	0-2023					
SRF I	No & Date					SRF	23/00868-000	1 & 11-1	10-2023			
Recei	ipt Date					11-10	0-2023					
Calibr	ration Date	;				11-10	0-2023					
Calibr	ration Due					10-10	0-2024					
	omer Name											
GOVE	ERNMENT	PRIM/	RY HEA	LTH CENTR	E,		 -					
MUN	AIVENDRI,	SIVAG	ANGAI D	ISTRICT.								
					Details of I	Device	Under Calibrat	ion (DUC) <u> </u>			
Descri	iption	:	SEMI A	UTO ANALYZ	ER Make & Model		& Model	: VERTIAS & NA				
Range	•	:	MULTI			Sr. N	0	:	AT3780317\$AB			
Resolu	ution	:	MULTI			Identi	fication No	;	NA -			
DUC (Condition	:	SATISI	ACTORY		Location :			LABORATATORY	LABORATATORY		
				Enviror	nmental Con	ditions	& Calibration	Procedu	e Details			
Enviro	nmental De	tails		Temperature:	25.6 ° C		Relative Humic	dity	52% RH			
Calibr	ation Proced	dure No		SBS/CP/MD/2	20	Calibration done at			ONSITE	ONSITE		
					Refe	erence	Standards Deta	ails				
S.No	Descriptio	n			Make/ SI No:		Certificate	e No	Validity			
1	Electrical Safety Analyser F				Rigel Medical & 44L-1059			M-230809	10-08-2024			

ELECTRICAL SAFETY

RESULTS

S.no	SPECIFICATION	MEASURED VALUES	EXPANDED UNCERTAINTY (±)
1	Insulation Resisitance	Measured values in MΩ	Uncertainty in % (±)
	>20MΩ	88	13.92
2	Earth Leakage	Measured values in µA	Uncertainty in % (±)
	<5000µAfor B,BF,CF	175	7.5
3	Enclosure Leakage	Measured values in µA	Uncertainty in % (±)
	<500µAfor B,BF,CF	235	7.2

REMARKS

- 1. This Calibration certificate shall not be reproduced except in full, without written approval of the laboratory.
- 2. The user should determine the suitability of the instrument for its intended use.
- 3. The recalibration interval should be determined on the user requirement.
- 4. The results stated in this certificate relate only to the item calibrated.
- 5. The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00.
- 6. Equipment used for Calibration were calibrated & traceable to National & International Standards.

 Calibrated By

(Calibration Engineer) N.VIJAY





Chief Executive



· · · · · · · · · · · · · · · · · · ·	·		<u> </u>	ALIBI	RATION CE	RTIFI	CATE		_		
Certifica	te No: SBS/CL/23/14206)								Page. No: 1 of 1	
Custome	er Name & Address										
						SRF No.		•	SRF/23/00868-0002		
GOVERN	NMENT PRIMARY HEA	LTH CENT	RE,			SRF Date			11-10-2023		
MUNAI	vendri,sivagangai	DISTRICT.				Date of R	eceipt	_	10-10-2023		
l						Date of C	alibration		11-10-2023		
l						Due Date	for Calibration		10-10-2024		
l						Issue Dat	e	12-10-2023			
Details c	of Unit Under Calibratio	on							<u> </u>		
Description MICRO PIPETTE						Make			THERMO SO	TENTIFIC	
Range		100-1000µl				Model			FINNPIPETT	E F3	
Resolutio	on	1µl				Material			PVC		
Serial N	umber	NA				Operating Range			100-1000µl		
ID Numl	ber	NA				Condition of UUC			Good		
Cal. At		Mechanica	l Lab			Instrument Location			LABORATORY		
						1					
		nvironmen	tal Conditio	on			Calibrat	ion Meth	od Used		
Tempera	iture (°C)	23.6	Humidity	(%RH)	55	National .	/ International Standa	ırd	ISO 8655-6:20	002	
Atmospl	heric Pressure (mbar)	1006	Water Temp	erature (°C)	21.6	Cal Proce	dure No		SBS/CP/ML/08		
Standard	i Used										
Si. No. Description ID.No. / SI. No.		Certificate No.		Make/Model	Trac	eability	Valid till				
1	Electronic Weighing	1511	2918	Т	VCSPL22/12/2115-01		A&D & GH-252	Nationa	ıl Standards	09-12-2023	

	Result of Calibration in µl												
Sl. No.	Nominal Value			Observed Re	Mean Value	Systemati c Error	Random Error	Measurement Uncertainty (±)					
	100	99.95	99.89	99.87	99.86	99.85	99.87	-0.13	0.03	0.47			
1		99.86	99.87	99.86	99.87	99.85		70.15	0.05				
2	500	499.97	499.98	499.95	499.96	499.95	499.95	0.05	0.02	0.47			
2	500	499.92	499.94	499.93	499.94	499.95		-0.05	0.02				
3	1000	999.95	999.97	999.95	999.96	999.97	999.96	0.04	0.01	0.47			
3	1000	999.95	999.97	999.96	999.97	999.98		-0.04	0.01				

Remarks

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- 3. The recalibration interval should be determined on the user requirement.
- 4. The results stated in this certificate relate only to the item calibrated.
- $5.\ Equipment\ used\ for\ Calibration\ were\ calibrated\ \&\ traceable\ to\ National\ \&\ International\ Standards$
- 6. The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00.

Chennai

7. Calibration Liquid Used: Distilled or Deionized water Carlot Day and as specified in ISO 3696. Calibrated Bv.

Balance

Authorised by:

Quality Manager/Chief Executive) C.SIVABALAN



			9	<u>CALIB</u>	RATION	CERTIF	<u>ICATE</u>				
Certificat	te No: SBS/CL/23/14207								-	Page, No: 1 of 1	
Custome	r Name & Address		- -						•		
						SRF No.		-	SRF/23/00868	-0003	
GOVERN	MENT PRIMARY HEA	LTH CENT	RE,			SRF Date			11-10-2023		
MUNAIV	'ENDRI,SIVAGANGAI	DISTRICT.				Date of R	eceipt		10-10-2023		
						Date of C	alibration		11-10-2023		
						Due Date	for Calibration	_	10-10-2024		
						Issue Date	2		12-10-2023		
Details o	f Unit Under Calibratio	on	_								
Description MICRO PIPETTE						Make			THERMO SCIENTIFIC		
Range 10-100µl					Model			FINNPIPETTE F3			
Resolutio	on .	0.2μ1				Material	Material				
Serial Nu	ımber	NA				Operating	Range	10-100μl			
D Numb	per	NA				Condition	Condition of UUC			Good	
Cal. At		Mechanical	Lab			Instrume	Instrument Location LABORATE				
	 E	invironment	tal Conditio	n			Calibrati	on Metho	l Used		
Tempera	ture (°C)	23.6	Humidity ((%RH)	54	National a	International Standard	i	ISO 8655-6:20	002	
Atmosph	eric Pressure (mbar)	1006	Water Temp	erature (°C)	21.6	Cal Proce	dure No		SBS/CP/ML/0	08	
Standard	Used	•				•			-		
SI. No.	Description	ID.No.	/ SI. No.		Certificate N	D.	Make/Model	Ттас	ceability Valid til		
1	Electronic Weighing Balance	1511	2918	7	TVCSPL22/12/21	15-01	A&D & GH-252	Nationa	l Standards	09-12-2023	
	·	•							Z Factor:	1 00319	

	Result of Calibration in µl												
Sl. No.	Nominal Value			Observed R	eadings	Mean Value	Systematic Error	Random Error	Measurement Uncertainty (±)				
	10.0	9.96	9.95	9.98	9.96	9.97	9.97	-0.03	0.01	0.47			
1		9.98	9.96	9.97	9.98	9.95	7.77	-0.00	0.01				
2	50.0	49.86	49.85	49.87	49.86	49.85	49.91	-0.09	0.05	0.47			
2	50.0	49.95	49.96	49.97	49.95	49.95							
3	100.0	99.78	99.79	99.78	99.78	99.77	99.78	-0.22	0.01	0.47			
3	100.0	99.79	99.78	99.76	99.78	99.78	79./8	-0.22					

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- 4. The results stated in this certificate relate only to the item calibrated.
- 5. Equipment used for Calibration were calibrated & traceable to National & International Standards
- 6.The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00.

7. Calibration Liquid Used: Distilled or Deionized water conformal specified in ISO 3696.

Calibrated By,

(Calibration Engineer) M.RAGUL

Authorised by:

Quality Manager Chief Executive)



			<u>c</u>	ALIBE	RATION CE	RTIFI	CATE			
Certificat	te No: SBS/CL/23/14208	,								Page. No : 1 of 1
Custome	r Name & Address									
						SRF No.			SRF/23/00868	3-0004
COVERN	NMENT PRIMARY HEA	ALTH CENT	RE,			SRF Date			11-10-2023	
MUNAI	/ENDRI,SIVAGANGAI	DISTRICT.				Date of R	eceipt		10-10-2023	
						Date of C	alibration		11-10-2023	
						Due Date	for Calibration		10-10-2024	
						Issue Dat	e		12-10-2023	
Details o	f Unit Under Calibratio	on							·	
Description MICRO PIPETTE						Make			MICROLUX	
Range		5-50µl				Model			NA	
Resolutio	on	1µl			<u> </u>	Material			PVC	
Serial Nu	ımber	NA				Operating Range			10-50யி	
iD Numb	per	NA				Condition of UUC			Good	
Cal. At		Mechanica	l Lab		Instrument Location				LABORATORY	
	F	nvironmen	tal Canditio	·			Calibrat	ion Metho	ad Head	
		1	<u> </u>		ı					
Tempera	ture (°C)	23.7	Humidity ((%RH)	54	National	/ International Standa	ırd	ISO 8655-6:20	002
Atmosph	neric Pressure (mbar)	1006	Water Temp	erature (°C)	21.6	Cal Proce	dure No		SBS/CP/ML/	08
Standard	Used								<u></u>	<u> </u>
SI. No.	Description	ID.No.	/ SI. No.		Certificate No.	Make/Model Tr		Trac	ceability Valid till	
1	Electronic Weighing Balance	1511	2918	1	VCSPL22/12/2115-01		A&D & GH-252	Nationa	il Standards	09-12-2023
									Z Factor:	1.00319

	Result of Calibration in µl											
Sl. No.	Nominal Observed Readings Value							Systemati c Error	Random Error	Measurement Uncertainty (±)		
1	10	9.91	9.93	9.92	9,94	9.96	9.94	-0.06	0.00	0.47		
1		9.94	9.95	9.93	9.95	9.95		70.00	0.02			
2	30	29,96	29.97	29.98	29.99	29.95	29.95	0.05	0.02	0.47		
2	30	29.90	29.91	29.93	29.94	29.95		-0.05	0.03			
3	50	49.85	49.84	49.83	49.85	49.86	40.00	0.14	0.00	0.47		
3	30	49.86	49.87	49.88	49.89	49.90	49.86	-0.14	0.02	0.47		

Remarks

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- 3. The recalibration interval should be determined on the user requirement.
- 4. The results stated in this certificate relate only to the item calibrated.
- $5.\ Equipment\ used\ for\ Calibration\ were\ calibrated\ \&\ traceable\ to\ National\ \&\ International\ Standards$
- 6. The indicated uncertainties are expanded uncertainty estimated for a confidence level of approximately 95% for a coverage factor k=2.00. WED/C

600 032

7. Calibration Liquid Used: Distilled or Deionized wa

Calibrated By,

(Calibration Engineer) M.RAGUL

3 as specified in ISO 3696. Chennai

Authorised by:

(Quality Manager/Chief Executive)

SUNSHINE BIOMEDICAL SOLUTIONS

No:68, First Floor, Poomagal Main Road, Ekkattuthangal, Chennai - 600 032, Tel: 044 - 2225 2087, E-Mail: calibration@sunshinebiomedical.com, Website: www.sunshinebiomedical.com.