CC-2146

Indian Calibration Services

An Exclusive House for Validation & Calibration of Analytical Instruments
304 & 313, Laxmi Deep, District Centre, Near Nirman Vihar Metro Station, Laxmi Nagar, Delhi-110092
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CALIBRATION CERTIFICATE

CALIBRATION CERTIFICATE OF MICROPIPETTE

Certificate No:	21700000018	**Issued On:**	06/01/2021
ULR No:	CC214621700000018F	**Calibration Date:**	05/01/2021
Job Identification No:	ICS/C/MVD/01/18	**Next Calibration Date:**	04/01/2022
Ref. No:	SRF, Dated - 04/01/2021		

CALIBRATED FOR:	**M/s Alaknanda Diagnostic Lab.** H-1, Vikrmaditya Tower, (Basement), Alaknanda Shopping Complex, Alaknanda, New Delhi-110019.

EQUIPMENT DESCRIPTION

Name	Variable Micropipette		
Make/Model	---	**Visual Inspection**	Ok
Serial No.	YE4A217917	**I.D. No.**	---
Range	5 µl - 50 µl	**Least Count**	0.5 µl
Location	---	**Calibration Site**	In-Lab

ENVIRONMENTAL CONDITIONS

Temperature	25.0 °C ± 3.0° C	**Humidity**	50 ± 10 % RH

STANDARD EQUIPMENT DETAILS
Traceable to National Standards

Name	Make	Certificate No.	Calibration Agency	Calibration Date	Valid Upto
Stainless Steel Wire Weights	E_1Class as per OIML recom.	**WMCL/E/2020-05/3364**	WMCL	31/05/2020	30/05/2023
RTD Sensor with Digital Indicator	Udian	**ERTL(N)/2020/AR0878**	ERTL (NORTH)	25/02/2020	25/02/2021

USED EQUIPMENT DETAILS	Calibrated Balance, Distilled Water & Glass wares
PRINCIPLE/METHODOLOGY OF CALIBRATION:	As per Calibration Procedure No.: **ICS/CAL/SOP-M03 (Gravimetric Method), ISO 8655-6**

RESULTS: Mechanical Calibration
Below Volume is determined at 27°C

U.U.C. Reading (in ml)	Standard Measured Volume (in ml) (Average)	Uncertainty at approx 95% C.L and coverage factor k=2
0.0050 (05.0 µl)	0.004941 (0004.941 µl)	± 0.3 µl
0.0250 (25.0 µl)	0.024905 (0024.905 µl)	± 0.3 µl
0.0500 (50.0 µl)	0.049863 (0049.863 µl)	± 0.3 µl

REMARKS: The recommended date for next calibration is mentioned, as asked by the customer.

*****END OF REPORT*****

For and on behalf of
Indian Calibration Services

Checked by

Authorised Signatory
RAJESH KAPOOR
Operation Head

Weightronics Mass Calibration Laboratory (WMCL)

WEIGHTRONICS
An ISO 9001 : 2015 Company

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NABL/ILAC/0115 CC-2743

Format No.: 7.8-QF-02

Calibration Certificate

Issue Dated: 01-06-2020

Recommended Date for the Next Calibration Mentioned As Per Request of the Customer Date: 30-05-2023	Page -1-	No. of Pages -2-

Certificate No.: WMCL/E/2020-05/3364
ULR - CC274320000000864F

Date of Calibration: 31-05-2020

Calibrated for	:	INDIAN CALIBRATION SERVICES 304 & 313, Laxmi Deep, District Center, Laxmi Nagar, Near Nirman Vihar Metro Station, Delhi – 110 092, INDIA
Customer Reference	:	RGP No.: NIL, Dated: 21/05/2020
Description of Instrument 0.5 g to 0.001 g	: :	Make – "WEIGHTRONICS" Stainless Steel Wire Type Weights
Identification No	:	WT/AS-I/2015/2423
Assumed Density (d)	:	(7 950 ± 50) kg/m^3; (k=2) for Stainless Steel
Environmental Conditions	: :	Temperature : (23.0 ± 2.0)^{0}C Relative Humidity : (50.0 ± 10.0) % [Change in Temperature and Relative Humidity during the calibration were less than ± 0.3^{0}C per hour and ± 5.0 % per 4 hours respectively]
Standard (s) used	:	WMCL working standard of mass with uncertainty Better than one-third of the reported uncertainty of measurement
Traceability Standard (s)	:	The Standard used for Calibration are Traceable from "NPL" New Delhi, INDIA vide Calibration Certificate No.: 19100739/D1.01/C-117, Dated: 11/12/2019 valid up to Dated: 11/12/2022
Balance used for Calibration	:	Precision Balances of Appropriate Accuracy Traceable to Mass Standards
Methodology of Calibration Adopted	:	The Method of comparison with standard (s) using Sub – Division Weighing Method from 1 mg to 500 mg (Cal. Procedure No.: WMCL/ Doc-13/Cal- PR-03) and (ABBA or ABA) Weighing Cycle. The Reported Mass Values(s) is (are) the conventional mass value(s) (M_C) related to the true mass value(s) (M_T) by formula: $M_C=M_T$ [1-1.2(1/d-1/8000)]. (Where,'d' is in kg/m^3).

Calibrated by:

Arun Pathak
Technical Manager

Issued by:

Lalit Shukla (Q.M.)
Authorized Signatory