

ALS Technichem (HK) Pty Ltd 11/F, Chung Shun Knitting Centre 1-3 Wing Yip Street, Kwai Chung N.T., Hong Kong T: +852 2610 1044 | F: +852 2610 2021

# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: CLIENT:	MR K.W.FAN ENVIROTECH SERVICES CO.	WORK ORDER:	HK2152127
ADDRESS:	RM113, 1/F, MY LOFT, 9 HOI WING ROAD,	SUB-BATCH:	0
	TUEN MUN, N.T. HONG KONG	LABORATORY:	HONG KONG
		DATE RECEIVED:	17-Dec-2021
		DATE OF ISSUE:	22-Dec-2021

### SPECIFIC COMMENTS

Equipment information (Brand name, Model No., Serial No. and Equipment No.) is provided by client. The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.

The "Tolerance Limit" quoted is the acceptance criteria applicable for similar equipment used by the laboratory or quoted from relevant international standards.

The "Next Calibration Date" is recommended according to best practice principle as practised by the laboratory or quoted from relevant international standards.

The validity of equipment/ meter performance only applies to the result(s) stated in the report.

Equipment Type:	Multifunctional Meter
Service Nature:	Performance Check
Scope:	Conductivity, Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature
Brand Name/ Model No.:	[HORIBA]/ [U-53]
Serial No./ Equipment No.:	[KP23RRSM]/ [N/A]
Date of Calibration:	20-December-2021

### **GENERAL COMMENTS**

This is the Final Report and supersedes any previous report(s) with this reference.

Ms. Lin Wai Yu, Iris Assistant Manager - Inorganics

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WORK ORDER:	HK2152127		ALS
SUB-BATCH: DATE OF ISSUE: CLIENT:	0 22-Dec-2021 ENVIROTECH SERVICES CO.		
Equipment Type:	Multifunctional Meter		
Brand Name/ Model No.:	[HORIBA]/ [U-53]		
Serial No./ Equipment No.:	[KP23RRSM]/ [N/A]		
Date of Calibration:	20-December-2021	Date of Next Calibration:	20-March-2022

PARAMETERS:

Conductivity Method Ref: APHA (21st edition), 2510B

Expected Reading (µS/cm)	Displayed Reading ( <b>µ</b> S/cm)	Tolerance (%)	
146.9	151	+2.8	
6667	6180	-7.3	
12890	12700	-1.5	
58670	53700	-8.5	
	Tolerance Limit (%)	±10.0	

#### Dissolved Oxygen

#### Method Ref: APHA (21st edition), 45000: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.91	3.99	+0.08
5.85	5.76	-0.09
8.56	8.48	-0.08
	Tolerance Limit (mg/L)	±0.20

pH Value

#### Method Ref: APHA (21st edition), 4500H: B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)		
4.0	4.05	+0.05		
7.0	6.92	-0.08		
10.0	9.93	-0.07		
	Tolerance Limit (pH unit)	±0.20		

Remark: "Displayed Reading" presents the figures shown on item under calibration / checking regardless of equipment precision or significant figures.

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Date of Calibration:	20-December-2021	Date of Next Calibration:	20-March-2022	

PARAMETERS:

Turbidity Method Ref: APHA (21st edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)	
0	0.32		
4	4.07	+1.8	
40	41.7	+4.3	
80	82.3	+2.9	
400	419	+4.8	
800	820	+2.5	
	Tolerance Limit (%)	±10.0	

Salinity

Method Ref: APHA (21st edition), 2520B

Expected Deading (ppt) Displayed Deading (ppt) Telerance (%)				
Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)		
0	0.02			
10	9.93	-0.7		
20	19.91	-0.4		
30	29.23	-2.6		
	Tolerance Limit (%)	±10.0		

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Serial No./ Equipment No.:	[KP23RRSM]/ [N/A]			
Date of Calibration:	20-December-2021	Date of Next Calibration:	20-March-2022	
PARAMETERS:				

Temperature

Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)
10.5	10.08	-0.4
21.0	20.32	-0.7
39.5	38.76	-0.7
	Tolerance Limit (°C)	±2.0

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Page 4 of 4