

ANNEX F1

CALIBRATION CERTIFICATES FOR SURFACE WATER QUALITY MONITORING EQUIPMENT



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# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR IVAN LEUNG WORK ORDER: HK2508550

**CLIENT:** ALS TECHNICHEM (HK) PTY LTD

ADDRESS: 11/F., CHUNG SHUN KNITTING CENTRE, SUB-BATCH: (

1-3 WING YIP STREET, KWAI CHUNG, N.T. LABORATORY: HONG KONG

**DATE RECEIVED:** 04-Mar-2025 **DATE OF ISSUE:** 10-Mar-2025

### **GENERAL COMMENTS**

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.

This report superseded any previous report(s) with same work order number.

#### **EQUIPMENT INFORMATION**

Equipment information (Brand name, Model No., Serial No. and Equipment No.) is provided by client.

Equipment Type: Multifunctional Meter Service Nature: Performance Check

Scope: Conductivity, Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature

Brand Name/ Model No.: [HORIBA]/ [U-52G]
Serial No./ Equipment No.: [NVAE08GT]/ [N/A]
Date of Calibration: 10-March-2025

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Ms. Cheng Sin Ying, May Senior Chemist - Inorganics

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## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2508550

SUB-BATCH:

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**DATE OF ISSUE:** 

10-Mar-2025

**CLIENT:** 

ALS TECHNICHEM (HK) PTY LTD

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-52G]

Serial No./

[NVAE08GT]/[N/A]

Equipment No.: Date of Calibration:

10-March-2025

Date of Next Calibration:

10-June-2025

**PARAMETERS:** 

Conductivity

Method Ref: APHA (23rd edition), 2510B

Expected Reading (μS/cm)	Displayed Reading (μS/cm)	Tolerance (%)
146.9	157	+6.9
6667	6410	-3.9
12890	12700	-1.5
58670	56200	-4.2
	Tolerance Limit (%)	±10.0

**Dissolved Oxygen** 

Method Ref: APHA (23rd edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.87	2.92	+0.05
5.78	5.83	+0.05
6.89	6.84	-0.05
	Tolerance Limit (mg/L)	±0.20

pH Value

Method Ref: APHA (23rd edition), 4500H: B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)
4.0	3.98	-0.02
7.0	6.95	-0.05
10.0	9.94	-0.06
	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 ISSUE:** 

10-Mar-2025

**CLIENT:** 

ALS TECHNICHEM (HK) PTY LTD

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-52G]

Serial No./

[NVAE08GT]/ [N/A]

Equipment No.: Date of Calibration:

10-March-2025

Date of Next Calibration:

10-June-2025

**PARAMETERS:** 

**Turbidity** 

Method Ref: APHA (23rd edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.00	
4	4.1	+2.5
40	40.1	+0.3
80	76.0	-5.0
400	381	-4.8
800	753	-5.9
	Tolerance Limit (%)	±10.0

Salinity

Method Ref: APHA (23rd edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.06	
10	9.75	-2.5
20	19.56	-2.2
30	29.20	-2.7
	Tolerance Limit (%)	±10.0

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WORK ORDER: HK2508550

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**CLIENT:** ALS TECHNICHEM (HK) PTY LTD

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-52G]

Serial No./

[NVAE08GT]/ [N/A]

Equipment No.: Date of Calibration:

10-March-2025

10-June-2025

**PARAMETERS:** 

**Temperature** 

Method Ref: Section 6 of International Accreditation New Zealand Technical

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

Date of Next Calibration:

Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)
12.0	13.20	+1.2
19.0	19.22	+0.2
37.5	36.34	-1.2
	Tolerance Limit (°C)	±2.0

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