

ANNEX F1

CALIBRATION CERTIFICATES OF WATER QUALITY MONITORING EQUIPMENT



CLIENT: Civil Engineering and Development Department
PROJECT NO: 0785165 DATE: 16 October 2025 VERSION: 0



### ALS Technichem (HK) Pty Ltd

11/F., Chung Shun Knitting Centre,

1 - 3 Wing Yip Street,

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# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR K.W. FAN WORK ORDER: HK2539507

**CLIENT:** ENVIROTECH SERVICES CO.

ADDRESS: RM 712, 7/F, MY LOFT SUB-BATCH: (

9 HOI WING ROAD,
TUEN MUN, N.T. HK

DATE RECEIVED:
12-Sep-2025
DATE OF ISSUE:
19-Sep-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This report superseded any previous report(s) with same work order number.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-53]
Serial No./ Equipment No.: [FXMONLLF]/ [N/A]
Date of Calibration: 19-September-2025

M

Ms. Cheng Sin Ying, May Senior Chemist - Inorganics

This report shall not be reproduced except in full without the written approval of the laboratory.

WORK ORDER: HK2539507

**SUB-BATCH:** 0

**DATE OF ISSUE:** 19-Sep-2025

**CLIENT:** ENVIROTECH SERVICES CO.

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-53]

Serial No./ Equipment No.:

[FXMONLLF]/[N/A]

Date of Calibration:

19-September-2025 Date of Next Calibration:

19-December-2025

**PARAMETERS:** 

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

Expected Reading (μS/cm)	Displayed Reading (μS/cm)	Tolerance (%)
146.9	156	+6.2
6667	6230	-6.6
12890	12300	-4.6
58670	57100	-2.7
	Tolerance Limit (%)	±10.0

**Dissolved Oxygen** 

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

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.41	2.34	-0.07
4.58	4.67	+0.09
7.34	7.25	-0.09
	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	3.83	-0.17
7.0	6.82	-0.18
10.0	9.86	-0.14
	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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WORK ORDER: HK2539507

**SUB-BATCH:** 0

**DATE OF ISSUE:** 19-Sep-2025

**CLIENT:** ENVIROTECH SERVICES CO.

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-53]

Serial No./ Equipment No.:

[FXMONLLF]/[N/A]

Date of Calibration:

19-September-2025

Date of Next Calibration:

19-December-2025

## **PARAMETERS:**

### **Turbidity**

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

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.86	
4	4.13	+3.3
40	43.3	+8.2
80	79.9	-0.1
400	420	+5.0
800	832	+4.0
	Tolerance Limit (%)	±10.0

### **Salinity**

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

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	
10	9.75	-2.5
20	18.73	-6.4
30	27.53	-8.2
	Tolerance Limit (%)	±10.0

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

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WORK ORDER: HK2539507

**SUB-BATCH:** 0

19-Sep-2025

**CLIENT:** ENVIROTECH SERVICES CO.

Equipment Type:

**DATE OF ISSUE:** 

Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-53]

Serial No./

[FXMONLLF]/[N/A]

Equipment No.: Date of Calibration:

19-September-2025

Date of Next Calibration:

19-December-2025

**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	11.88	+1.4
19.5	19.31	-0.2
39.5	39.24	-0.3
	Tolerance Limit (°C)	±2.0

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





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# REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: MR MAGNUM FAN WORK ORDER: HK2530577

**CLIENT:** ENVIROTECH SERVICES CO.

ADDRESS: RM 712, 7/F, MY LOFT SUB-BATCH: (

9 HOI WING ROAD,
TUEN MUN, N.T. HK
DATE RECEIVED: 17-Jul-2025
DATE OF ISSUE: 28-Jul-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.: [YSI]/ [ProDSS]

Serial No./ Equipment No.: [19C102067/19C000245]/ [N/A]

Date of Calibration: 25-July-2025

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Ms. Cheng Sin Ying, May Senior Chemist - Inorganics

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**WORK ORDER:** HK2530577

**SUB-BATCH:** 

0

**DATE OF ISSUE:** 

28-Jul-2025

**CLIENT:** 

ENVIROTECH SERVICES CO.

Equipment Type:

Multifunctional Meter

Brand Name/

[YSI]/[ProDSS]

Model No.: Serial No./

Equipment No.:

[19C102067/19C000245]/[N/A]

Date of Calibration:

25-July-2025

Date of Next Calibration:

25-October-2025

## **PARAMETERS:**

### Conductivity

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

Expected Reading (µS/cm)	Displayed Reading (μS/cm)	Tolerance (%)
146.9	144.4	-1.7
6667	6926	+3.9
12890	12252	-4.9
58670	55428	-5.5
	Tolerance Limit (%)	±10.0

## **Dissolved Oxygen**

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

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.62	2.50	-0.12
4.60	4.48	-0.12
6.72	6.62	-0.10
	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	3.95	-0.05
7.0	6.94	-0.06
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.

WORK ORDER: HK2530577

**SUB-BATCH:** 0

**DATE OF ISSUE:** 28-Jul-2025

**CLIENT:** ENVIROTECH SERVICES CO.

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[YSI]/[ProDSS]

Serial No./

[19C102067/19C000245]/[N/A]

Equipment No.: Date of Calibration:

25-July-2025

Date of Next Calibration: 25-October-2025

**PARAMETERS:** 

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

<b>Expected Reading (NTU)</b>	Displayed Reading (NTU)	Tolerance (%)
0	-0.50	
4	3.89	-2.8
40	41.00	+2.5
80	83.27	+4.1
400	406.15	+1.5
800	800.92	+0.1
	Tolerance Limit (%)	±10.0

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

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	
10	9.75	-2.5
20	19.42	-2.9
30	29.58	-1.4
	Tolerance Limit (%)	±10.0

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

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WORK ORDER: HK2530577

**SUB-BATCH:** 0

**DATE OF ISSUE:** 28-Jul-2025

**CLIENT:** ENVIROTECH SERVICES CO.

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[YSI]/[ProDSS]

Serial No./

[19C102067/19C000245]/[N/A]

Equipment No.:

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Date of Calibration: 25-July-2025

Date of Next Calibration:

25-October-2025

**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)
8.0	8.5	+0.5
19.0	19.1	+0.1
40.5	40.3	-0.2
	Tolerance Limit (°C)	±2.0

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

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