



REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT:	MR K.W.FAN	WORK ORDER:	HK2139235
CLIENT:	ENVIROTECH SERVICES CO.		
ADDRESS:	RM113, 1/F, MY LOFT, 9 HOI WING ROAD, TUEN MUN, N.T. HONG KONG	SUB-BATCH:	0
		LABORATORY:	HONG KONG
		DATE RECEIVED:	28-Sep-2021
		DATE OF ISSUE:	04-Oct-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-5000/U-53]
Serial No./ Equipment No.:	[LUAVCDWU]/ [FXMONLLF]
Date of Calibration:	04-October-2021

GENERAL COMMENTS

This is the Final Report and supersedes any preliminary report with this batch number.

Ms. Lin Wai Yu, Iris
Assistant Manager - Inorganic

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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION



WORK ORDER: HK2139235
 SUB-BATCH: 0
 DATE OF ISSUE: 04-Oct-2021
 CLIENT: ENVIROTECH SERVICES CO.

Equipment Type: Multifunctional Meter
 Brand Name/ Model No.: [HORIBA]/ [U-5000/U-53]
 Serial No./ Equipment No.: [LUAVCDWU]/ [FXMONLLF]
 Date of Calibration: 04-October-2021 Date of Next Calibration: 04-January-2022

PARAMETERS:

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

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)
146.9	149.0	+1.4
6667	6230	-6.6
12890	12670	-1.7
58670	56300	-4.0
	Tolerance Limit (%)	±10.0

Dissolved Oxygen Method Ref: APHA (21st edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.91	4.10	+0.19
5.80	5.93	+0.13
7.22	7.17	-0.05
	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	4.11	+0.11
7.0	7.08	+0.08
10.0	10.06	+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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 Assistant Manager - Inorganic

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WORK ORDER: HK2139235
 SUB-BATCH: 0
 DATE OF ISSUE: 04-Oct-2021
 CLIENT: ENVIROTECH SERVICES CO.

Equipment Type: Multifunctional Meter
 Brand Name/ Model No.: [HORIBA]/ [U-5000/U-53]
 Serial No./ Equipment No.: [LUAVCDWU]/ [FXMONLLF]
 Date of Calibration: 04-October-2021 Date of Next Calibration: 04-January-2022

PARAMETERS:

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

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.08	--
4	4.02	+0.5
40	39.4	-1.5
80	80.4	+0.5
400	428	+7.0
800	835	+4.4
	Tolerance Limit (%)	±10.0

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

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	--
10	10.06	+0.6
20	19.91	-0.4
30	29.61	-1.3
	Tolerance Limit (%)	±10.0

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DATE OF ISSUE: 04-Oct-2021
CLIENT: ENVIROTECH SERVICES CO.

Equipment Type: Multifunctional Meter
Brand Name/ Model No.: [HORIBA]/ [U-5000/U-53]
Serial No./ Equipment No.: [LUAVCDWU]/ [FXMONLLF]
Date of Calibration: 04-October-2021 Date of Next Calibration: 04-January-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	10.97	+0.5
21.5	20.62	-0.9
39.5	39.41	-0.1
	Tolerance Limit (°C)	±2.0

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CLIENT: ENVIROTECH SERVICES CO.
ADDRESS: RM113, 1/F, MY LOFT, 9 HOI WING ROAD,
TUEN MUN, N.T. HONG KONG

WORK ORDER: HK2152127
SUB-BATCH: 0
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
 SUB-BATCH: 0
 DATE OF ISSUE: 22-Dec-2021
 CLIENT: 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 (µS/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), 4500O: 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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WORK ORDER: HK2152127
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 CLIENT: 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:

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 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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CLIENT: 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:

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

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

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