Annex F7

Calibration Certificates for Groundwater Monitoring Equipment



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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: BEN TAM WORK ORDER: HK2241896

CLIENT: ACTION-UNITED ENVIRONMENTAL SERVICES &

ADDRESS: RM A 20/F., GOLD KING IND BLDG, **SUB-BATCH:**

NO. 35-41 TAI LIN PAI ROAD,

KWAI CHUNG, N.T.

LABORATORY: HONG KONG **DATE RECEIVED:** 24-Oct-2022 **DATE OF ISSUE:** 31-Oct-2022

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.

Multifunctional Meter Equipment Type: Service Nature: Performance Check

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

Brand Name/ Model No.: [YSI]/ [Professional DSS]

Serial No./ Equipment No.: [20J101862/15H103928]/[EQW018]

Date of Calibration: 25-October-2022

GENERAL COMMENTS

This report superseded any previous report(s) with same work order number.

Ms. Lin Wai Yu, Iris Assistant Manager - Inorganics

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REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2241896

SUB-BATCH: 0

DATE OF ISSUE: 31-Oct-2022

CLIENT: ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING

Equipment Type:

Multifunctional Meter

Brand Name/

[YSI]/ [Professional DSS]

Model No.: Serial No./

Equipment No.:

[20J101862/15H103928]/[EQW018]

Date of Calibration:

25-October-2022

Date of Next Calibration: 2

25-January-2023

PARAMETERS:

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

Expected Reading (mS/cm)	Displayed Reading (mS/cm)	Tolerance (%)
146.9	149.8	+2.0
6667	7120	+6.8
12890	13262	+2.9
58670	58816	+0.2
	Tolerance Limit (%)	±10.0

Dissolved Oxygen

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

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
2.10	1.99	-0.11
3.57	3.55	-0.02
7.92	7.79	-0.13
	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	3.89	-0.11
7.0	7.08	+0.08
10.0	9.92	-0.08
	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.

Ms. Lin Wai Yu, Iris

Assistant Manager - Inorganics

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2241896

SUB-BATCH: 0

DATE OF ISSUE: 31-Oct-2022

CLIENT: ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING

Equipment Type:

Multifunctional Meter

Brand Name/ Model No.:

[YSI]/ [Professional DSS]

Serial No./

[20J101862/ 15H103928]/ [EQW018]

Equipment No.: Date of Calibration:

25-October-2022

Date of Next Calibration: 25-January-2023

PARAMETERS:

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

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.50	
4	4.25	+6.3
40	36.21	-9.5
80	81.94	+2.4
400	380.13	-5.0
800	764.90	-4.4
	Tolerance Limit (%)	±10.0

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

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.00	
10	9.46	-5.4
20	18.39	-8.1
30	28.45	-5.2
	Tolerance Limit (%)	±10.0

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

Ms. Lin Wai Yu, Iris

Assistant Manager - Inorganics

REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2241896

SUB-BATCH: 0

DATE OF ISSUE: 31-Oct-2022

CLIENT: ACTION-UNITED ENVIRONMENTAL SERVICES & CONSULTING

Equipment Type:

Multifunctional Meter

25-October-2022

Brand Name/ Model No.:

[YSI]/ [Professional DSS]

Serial No./

[20J101862/15H103928]/[EQW018]

Equipment No.: Date of Calibration:

[200101002/1011100/20]/[2011010]

Date of Next Calibration: 25-January-2023

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)
9.0	8.8	-0.2
25.0	24.7	-0.3
43.5	42.7	-0.8
	Tolerance Limit (°C)	±2.0

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

Ms. Lin Wai Yu, Iris

Assistant Manager - Inorganics