

<u>Appendix H</u> <u>Water Quality Monitoring Equipment</u> <u>Calibration Certificate</u>

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

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PART A – CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited Unit C, 11/F, Ford Glory Plaza 37-39 Wing Hong Street Cheung Sha Wan, Kowloon, Hong Kong Attn: Mr. Nelson TSUI

PART B – DESCRIPTION

Name of Equipment	: HORIBA U-53 Multi Parameters
Manufacturer	: HORIBA
Serial Number	: S2A98W8H
Date of Received	: Oct 26, 2021
Date of Calibration	: Oct 26, 2021
Date of Next Calibration ^(a)	: Jan 25, 2022

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

<u>Parameter</u>	Reference Method
pH at 25°C	APHA 21e 4500-H ⁺ B
Dissolved Oxygen	APHA 21e 4500-O G
Salinity	APHA 21e 2520 B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical
	Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D - CALIBRATION RESULTS^(b,c)

(1) pH at 25°C

Target (pH unit)	Displayed Reading ^(d) (pH Unit)	Tolerance ^(e) (pH Unit)	Results
4.00	4.03	0.03	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.19	0.18	Satisfactory

Tolerance of pH should be less than ± 0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
16	16.24	0.24	Satisfactory
25	25.10	0.10	Satisfactory
33	32.95	-0.05	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

- (a) The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
- (b) The results relate only to the calibrated equipment as received
- (c) The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- (d) "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
 (e) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant
- international standards.

LEE Chun-ning Senior Chemist



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PART D - CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
2.96	3.30	0.34	Satisfactory
3.41	3.76	0.35	Satisfactory
4.87	5.12	0.25	Satisfactory
7.92	8.00	0.08	Satisfactory

Tolerance limit of dissolved oxygen should be less than ± 0.50 (mg/L)

(4) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	10.47	4.70	Satisfactory
20	21.32	6.60	Satisfactory
30	32.20	7.33	Satisfactory

Tolerance limit of salinity should be less than ± 10.0 (%)

(5) Turbidity

Expected Reading (NTU)	Displayed Reading ^(f) (NTU)	Tolerance ^(g) (%)	Results
0	0.30		Satisfactory
10	10.8	8.0	Satisfactory
20	21.8	9.0	Satisfactory
100	109	9.0	Satisfactory
800	790	-1.3	Satisfactory

Tolerance limit of turbidity should be less than ± 10.0 (%)

~ END OF REPORT ~

<u>Remark(s): -</u>

"Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures. The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form (g)

relevant international standards.