



Appendix H Water Quality Monitoring Equipment Calibration Certificate



Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BB110035

Date of Issue

: 17 November 2022

Page No.

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PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited

Unit E, 12/F, Ford Glory Plaza 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment:

HORIBA U-53

Manufacturer:

HORIBA

Serial Number:

PPHNOMXY

Date of Received:

16 November 2022

Date of Calibration:

16 November 2022

Date of Next Calibration:

16 February 2023

Request No.:

D-BB110035

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

pH value

APHA 21e 4500 H+

Temperature

Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March

2008: Working Thermometer Calibration Procedure

Salinity

APHA 21e 2520 B

Dissolved oxygen

APHA 21e 4500 O

Turbidity

APHA 21e 2130 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.15	0.15	Satisfactory
7.42	7.34	-0.08	Satisfactory
10.01	9.92	-0.09	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
14	15.45	1.45	Satisfactory
21	21.44	0.44	Satisfactory
34	34.68	0.68	Satisfactory

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

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.61	-3.90	Satisfactory
20	21.04	5.20	Satisfactory
30	32.03	6.77	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

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AUTHORIZED SIGNATORY:

> LEE Chun-ning Assistant Manager (Chemical Testing)

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(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.88	7.70	-0.18	Satisfactory
4.52	5.00	0.48	Satisfactory
1.43	1.00	-0.43	Satisfactory
0.00	0.03	0.03	Satisfactory

Tolerance of Dissolved oxygen should be less than \pm 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.00		Satisfactory
10	9.80	-2.0	Satisfactory
20	19.5	-2.5	Satisfactory
100	104	4.0	Satisfactory
800	811	1.4	Satisfactory

Tolerance of Turbidity should be less than $\pm~10.0$ (%)

Remark(s)

- 'The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
- ·The results relate only to the calibrated equipment as received
- 'The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
- "Displayed Reading" denotes the figure 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 relevant international standards.

--- END OF REPORT ---



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BB110080

Date of Issue

: 30 November 2022

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PART A - CUSTOMER INFORMATION

Acuity Sustainability Consulting Limited

Unit E, 12/F, Ford Glory Plaza 37-39 Wing Hong Street, Cheung Sha Wan, Kowloon, Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment:

HORIBA U-53

Manufacturer:

HORIBA

Serial Number:

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NEKVM2XU

Date of Received:

24 November 2022

Date of Calibration : Date of Next Calibration : 29 November 202228 February 2023

Request No.:

D-BB110080

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

pH value

APHA 21e 4500 H+

Temperature

Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March

2008: Working Thermometer Calibration Procedure

Salinity

APHA 21e 2520 B

Dissolved oxygen

APHA 21e 4500 O

Turbidity

APHA 21e 2130 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.06	0.06	Satisfactory
7.42	7.51	0.09	Satisfactory
10.01	9.82	-0.19	Satisfactory

Tolerance of pH value should be less than \pm 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
13	14.36	1.36	Satisfactory
24	25.45	1.45	Satisfactory
31	31.90	0.90	Satisfactory

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

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.84	-1.60	Satisfactory
20	18.91	-5.45	Satisfactory
30	27.97	-6.77	Satisfactory

Tolerance of Salinity should be less than \pm 10.0 (%)

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AUTHORIZED SIGNATORY:

LEE Chun-ning

Assistant Manager (Chemical Testing)



專業化驗有限公司 QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong Email: info@qualityprotest.com; Website: www.qualityprotest.com Tel: (852) 3956 8717; Fax: (852) 3956 3928

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(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.01	7.96	-0.05	Satisfactory
5.43	5.67	0.24	Satisfactory
2.06	2.39	0.33	Satisfactory
0.55	0.21	-0.34	Satisfactory

Tolerance of Dissolved oxygen should be less than $\pm~0.5$ (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.60		Satisfactory
10	9.60	-4.0	Satisfactory
20	18.1	-9.5	Satisfactory
100	99.9	-0.1	Satisfactory
800	775	-3.1	Satisfactory

Tolerance of Turbidity should be less than \pm 10.0 (%)

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