

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

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BD060107

Date of Issue

: 03 July 2024

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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:

YSI ProDSS Multi Parameters

Manufacturer:

YSI

Serial Number:

15M101091

Date of Received:

26 June 2024

Date of Calibration :

Date of Next Calibration :

03 July 2024 02 October 2024

Request No.:

D-BD060107

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

pH value

APHA 21e 4500-H+ B

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 23e 4500-O G (Membrane Electrode Method)

Turbidity

APHA 21e 2130 B (Nephelometric Method)

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.10	0.10	Satisfactory
7.42	7.40	-0.02	Satisfactory
10.01	9.90	-0.11	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
20.0	19.0	-1.0	Satisfactory
27.5	26.8	-0.7	Satisfactory
36.0	35.5	-0.5	Satisfactory

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

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.90	-1.00	Satisfactory
20	20.24	1.20	Satisfactory
30	30.62	2.07	Satisfactory

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

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AUTHORIZED SIGNATORY:

LEE Chun-ning Assistant Manager

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(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.55	8.34	-0.21	Satisfactory
5.80	5.60	-0.20	Satisfactory
3.40	3.40	0.00	Satisfactory
0.43	0.42	-0.01	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	2.58		
10	9.62	-3.8	Satisfactory
20	19.67	-1.6	Satisfactory
100	104.41	4.4	Satisfactory
800	778.88	-2.6	Satisfactory

Tolerance of Turbidity should be less than ± 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.

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Test Report No.

: R-BD070022

Date of Issue

: 15 July 2024

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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:

YSI ProDSS Multi Parameters

Manufacturer:

YSI

Serial Number:

22C106561

Date of Received:

11 July 2024

Date of Calibration:

Date of Next Calibration:

12 July 2024

Request No.:

11 October 2024 D-BD070022

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

pH value

APHA 21e 4500-H+ B

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 23e 4500-O G (Membrane Electrode Method)

Turbidity

APHA 21e 2130 B (Nephelometric Method)

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.03	0.03	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.05	0.04	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
16.0	14.7	-1.3	Satisfactory
25.5	24.1	-1.4	Satisfactory
32.0	30.8	-1.2	Satisfactory

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

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.01	0.10	Satisfactory
20	20.21	1.05	Satisfactory
30	30.90	3.00	Satisfactory

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

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AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager

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(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.50	8.56	0.06	Satisfactory
7.11	6.66	-0.45	Satisfactory
4.31	4.13	-0.18	Satisfactory
0.69	0.30	-0.39	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	-0.12	=	
10	9.88	-1.2	Satisfactory
20	19.42	-2.9	Satisfactory
100	97.08	-2.9	Satisfactory
800	743.03	-7.1	Satisfactory

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

Remark(s)

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BD080045

Date of Issue

: 16 August 2024

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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:

YSI ProDSS Multi Parameters

Manufacturer:

YSI

Serial Number:

24G101660

Date of Received:

15 August 2024

Date of Calibration:

Date of Next Calibration:

16 August 2024 16 November 2024

Request No. :

D-BD080045

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter

Reference Method

pH value

APHA 21e 4500-H+ B

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 23e 4500-O G (Membrane Electrode Method)

Oxidation-Reduction Potential

APHA 22e 2580 B

Turbidity

APHA 21e 2130 B (Nephelometric Method)

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.05	0.05	Satisfactory
7.42	7.41	-0.01	Satisfactory
10.01	10.00	-0.01	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
18.0	17.3	-0.7	Satisfactory
26.0	24.5	-1.5	Satisfactory
32.0	31.6	-0.4	Satisfactory

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

(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.73	7.30	Satisfactory
20	21.86	9.30	Satisfactory
30	32.09	6.97	Satisfactory

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

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AUTHORIZED SIGNATORY:

Assistant Manager

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(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
8.09	8.18	0.09	Satisfactory
7.53	7.89	0.36	Satisfactory
6.52	6.27	-0.25	Satisfactory
1.92	1.57	-0.35	Satisfactory

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

(5) Oxidation-Reduction Potential

Expected Reading	Display Reading	Tolerance	Result
229	224.5	-4.5	Satisfactory

Tolerance of Oxidation-Reduction Potential should be less than \pm 10.0 (mV)

(6) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (a) (%)	Result
0	0.59		
10	10.27	2.7	Satisfactory
20	- 19.59	-2.1	Satisfactory
100	93.87	-6.1	Satisfactory
800	723.00	-9.6	Satisfactory

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

Remark(s)

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⁽a) For 0 NTU, Display Reading should be less than 1 NTU