# **Appendix D. Calibration Certificates**



Unit 10, 14/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

# REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BA120147

Date of Issue

: 30 December 2021

Page No.

: 1 of 2

### **PART A - CUSTOMER INFORMATION**

Enovative Environmental Service Ltd.

Flat 2207, Yu Fun House Yu Chui Court, Shatin

New Territories (HK) Hong Kong

Attn:

#### **PART B - SAMPLE INFORMATION**

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

17E100747

Date of Received:

24 December 202124 December 2021

Date of Calibration :

Date of Next Calibration :

23 March 2022

### PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

**Test Parameter** 

Reference Method

Turbidity

APHA 21e 2130B

Conductivity

APHA 21e 2510B

Dissolved oxygen

APHA 21e 4500 O APHA 21e 4500 H+

pH value Salinity

APHA 21e 2520B

Temperature

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

2008: Working Thermometer Calibration Procedure

### PART D - CALIBRATION RESULT

### (1) Turbidity

(1) Turbiany			
EXPECTED READING (NTU)	DISPLAY READING (NTU)	TOLERANCE (%)	RESULT
0	0.10		Satisfactory
10	9.88	-1.2	Satisfactory
20	19.79	-1.1	Satisfactory
100	100.26	0.3	Satisfactory
800	808.37	1.0	Satisfactory

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

#### (2) Conductivity

Conductivity			
EXPECTED READING (MS/CM AT 25°C)	DISPLAY READING ( MS/CM AT	TOLERANCE (%	RESULT
	25°C)	)	8
146.9	151.2	2.92	Satisfactory
1412	1348	-4.53	Satisfactory
12890	12591	-2.32	Satisfactory
58670	57734	-1.60	Satisfactory
111900	111592	-0.28	Satisfactory

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

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager (Chemical Testing)

This report shall not be reproduced unless with prior written approval from this laboratory



Unit 10, 14/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

# REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BA120147

Date of Issue

: 30 December 2021

Page No.

: 2 of 2

#### (3) Dissolved oxygen

EXPECTED READING ( MG/L )	DISPLAY READING (MG/L)	TOLERANCE (MG/L)	RESULT
7.65	7.76	0.11	Satisfactory
6.09	6.17	0.08	Satisfactory
3.20	3.28	0.08	Satisfactory
0.78	0.56	-0.22	Satisfactory

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

### (4) pH value

TARGET (PH UNIT)	DISPLAY READING ( PH UNIT )	TOLERANCE	RESULT
4.00	4.04	0.04	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	10.13	0.12	Satisfactory

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

### (5) Salinity

EXPECTED READING ( G/L )	DISPLAY READING (G/L)	TOLERANCE (%)	RESULT
10	9.93	-0.70	Satisfactory
20	19.89	-0.55	Satisfactory
30	30.20	0.67	Satisfactory

Tolerance of Salinity should be less than  $\pm 0.0$  (%)

### (6) Temperature

READING OF REF. THERMOMETER (°C)	DISPLAY READING (°C)	TOLERANCE (°C)	RESULT
10	9.9	-0.1	Satisfactory
20	20.0	0.0	Satisfactory
40	40.0	0.0	Satisfactory

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

### 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 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 ---



Unit 10, 14/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

### REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BA120148

Date of Issue

: 30 December 2021

Page No.

: 1 of 2

### PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.

Flat 2207, Yu Fun House Yu Chui Court, Shatin

New Territories (HK) Hong Kong

Attn:

### **PART B - SAMPLE INFORMATION**

Name of Equipment:

YSI ProDSS (Multi-Parameters)

Manufacturer:

YSI (a xylem brand)

Serial Number:

21G105356

Date of Received:

24 December 2021

Date of Calibration:

24 December 2021

Date of Next Calibration:

23 March 2022

#### PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

**Test Parameter** 

Reference Method

Turbidity

APHA 21e 2130B

Conductivity

APHA 21e 2510B

Dissolved oxygen

APHA 21e 4500 O APHA 21e 4500 H+

pH value Salinity

APHA 21e 2520B

Temperature

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

2008: Working Thermometer Calibration Procedure

### PART D - CALIBRATION RESULT

### (1) Turbidity

EXPECTED READING (NTU)	DISPLAY READING (NTU)	TOLERANCE (%)	RESULT
0	0.10		Satisfactory
10	9.81	-1.9	Satisfactory
20	19.82	-0.9	Satisfactory
100	100.22	0.2	Satisfactory
800	810.23	1.3	Satisfactory

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

### (2) Conductivity

EXPECTED READING (MS/CM AT 25°C)	DISPLAY READING ( MS/CM AT	TOLERANCE (%	RESULT
	25°C)	)	
146.9	150.3	2.31	Satisfactory
1412	1369	-3.05	Satisfactory
12890	12488	-3.12	Satisfactory
58670	57746	-1.57	Satisfactory
111900	111426	-0.42	Satisfactory

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

--- CONTINUED ON NEXT PAGE ---

AUTHORIZED SIGNATORY:

LEE Chun-ning
Assistant Manager (Chemical Testing)



Unit 10, 14/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

## REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No.

: R-BA120148

**Date of Issue** 

: 30 December 2021

Page No.

: 2 of 2

### (3) Dissolved oxygen

EXPECTED READING ( MG/L )	DISPLAY READING (MG/L)	TOLERANCE (MG/L)	RESULT
7.65	7.80	0.15	Satisfactory
6.09	6.20	0.11	Satisfactory
3.20	3.33	0.13	Satisfactory
0.78	0.56	-0.22	Satisfactory

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

### (4) pH value

TARGET (PH UNIT)	DISPLAY READING (PH UNIT)	TOLERANCE	RESULT
4.00	4.03	0.03	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.11	0.10	Satisfactory

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

### (5) Salinity

EXPECTED READING ( G/L )	DISPLAY READING (G/L)	TOLERANCE (%)	RESULT
10	9.93	-0.70	Satisfactory
20	19.88	-0.60	Satisfactory
30	30.19	0.63	Satisfactory

Tolerance of Salinity should be less than  $\pm 0.0$  (%)

### (6) Temperature

READING OF REF. THERMOMETER (°C)	DISPLAY READING (°C)	TOLERANCE (°C)	RESULT
10	9.9	-0.1	Satisfactory
20	20.0	0.0	Satisfactory
40	40.0	0.0	Satisfactory

Tolerance of Temperature should be less than  $\pm 2.0$  (°C)

### 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 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 ---