

ANNEX H

CALIBRATION CERTIFICATES FOR MARINE WATER QUALITY MONITORING EQUIPMENT



REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: **SAMUEL LAI**
CLIENT: **EGS (ASIA) LTD**
ADDRESS: **15/F., NORTH POINT INDUSTRIAL BUILDING,
499 KING'S ROAD,
NORTH POINT, HONG KONG**

WORK ORDER: **HK2112582**
SUB-BATCH: **0**
LABORATORY: **HONG KONG**
DATE RECEIVED: **31-Mar-2021**
DATE OF ISSUE: **01-Apr-2021**

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 validity of equipment/ meter performance only applies to the result(s) stated in the report.

Equipment Type: Multifunctional Meter
Service Nature: Performance Check
Scope: Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature
Brand Name/ Model No.: [YSI]/ [6920]
Serial No./ Equipment No.: [08C100240]/ [MPP30]
Date of Calibration: 31-March-2021

GENERAL COMMENTS

This is the Final Report and supersedes any preliminary report with this batch number.

Ms. Lin Wai Yu, Iris
Assistant Manager - Inorganic

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Equipment Type: Multifunctional Meter
 Brand Name/ Model No.: [YSI]/ [6920]
 Serial No./ Equipment No.: [08C100240]/ [MPP30]
 Date of Calibration: 31-March-2021

PARAMETERS:

Dissolved Oxygen Method Ref: APHA (21st edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.11	3.22	+0.11
5.37	5.38	+0.01
8.22	8.18	-0.04
	Tolerance Limit (mg/L)	±0.20

pH Value Method Ref: APHA (21st edition), 4500H: B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)
4.0	3.93	-0.07
7.0	7.01	+0.01
10.0	10.00	+0.00
	Tolerance Limit (pH unit)	±0.20

Turbidity Method Ref: APHA (21st edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.0	--
4	4.0	+0.0
40	40.1	+0.3
80	78.9	-1.4
	Tolerance Limit (%)	±10.0

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

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Equipment Type: Multifunctional Meter
 Brand Name/ Model No.: [YSI]/ [6920]
 Serial No./ Equipment No.: [08C100240]/ [MPP30]
 Date of Calibration: 31-March-2021

PARAMETERS:

Salinity Method Ref: APHA (21st edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.25	--
10	10.72	+7.2
20	20.36	+1.8
30	30.04	+0.1
	Tolerance Limit (%)	±10.0

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)
12.5	11.77	-0.7
23.0	22.45	-0.6
41.0	39.25	-1.8
	Tolerance Limit (°C)	±2.0

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LABORATORY: **HONG KONG**
DATE RECEIVED: **31-Mar-2021**
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Equipment Type: Multifunctional Meter
Service Nature: Performance Check
Scope: Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature
Brand Name/ Model No.: [YSI]/ [6820]
Serial No./ Equipment No.: [13H103324]/ [MPP45]
Date of Calibration: 31-March-2021

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 CLIENT: EGS (ASIA) LTD

Equipment Type: Multifunctional Meter
 Brand Name/ Model No.: [YSI]/ [6820]
 Serial No./ Equipment No.: [13H103324]/ [MPP45]
 Date of Calibration: 31-March-2021

PARAMETERS:

Dissolved Oxygen Method Ref: APHA (21st edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.70	3.86	+0.16
5.68	5.72	+0.04
8.01	8.00	-0.01
Tolerance Limit (mg/L)		±0.20

pH Value Method Ref: APHA (21st edition), 4500H: B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)
4.0	3.99	-0.01
7.0	7.01	+0.01
10.0	10.02	+0.02
Tolerance Limit (pH unit)		±0.20

Turbidity Method Ref: APHA (21st edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.0	--
4	3.6	-10.0
40	40.1	+0.3
80	79.4	-0.7
Tolerance Limit (%)		±10.0

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 Model No.: **[YSI]/ [6820]**
 Serial No./
 Equipment No.: **[13H103324]/ [MPP45]**
 Date of Calibration: **31-March-2021**

PARAMETERS:

Salinity Method Ref: APHA (21st edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.13	--
10	10.16	+1.6
20	19.22	-3.9
30	30.01	+0.0
	Tolerance Limit (%)	±10.0

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)
10.0	9.99	-0.0
23.5	22.80	-0.7
42.5	41.70	-0.8
	Tolerance Limit (°C)	±2.0

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