

#### ALS Technichem (HK) Pty Ltd

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## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

CONTACT: THOMAS CHAN WORK ORDER: HK2146953

CLIENT: MOTT MACDONALD HONG KONG LIMITED

ADDRESS: 3/F INTERNATIONAL TRADE TOWER, SUB-BATCH: (

**348 KWUN TONG ROAD, KWUN TONG,** LABORATORY: **HONG KONG KOWLOON, HONG KONG** DATE RECEIVED: **15-Nov-2021** 

DATE OF ISSUE: 24-Nov-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 "Next Calibration Date" is recommended according to best practice principle as practised 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: Conductivity, Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature

Brand Name/ Model No.: [HORIBA]/ [U-53]

Serial No./ Equipment No.: [HGS No.X42XKBNO]/ [4BHN08KG]

Date of Calibration: 23-November-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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## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2146953

SUB-BATCH: 0

DATE OF ISSUE: 24-Nov-2021

CLIENT: MOTT MACDONALD HONG KONG LIMITED

Equipment Type: Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-53]

Serial No./ Equipment No.:

[HGS No.X42XKBNO]/ [4BHN08KG]

Date of Calibration: 23-November-2021 Date of Next Calibration:

PARAMETERS:

Conductivity Method Ref: APHA (21st edition), 2510B

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)
146.9	151	+2.8
6667	6290	-5.7
12890	12600	-2.2
58670	54300	-7.4
	Tolerance Limit (%)	±10.0

Dissolved Oxygen

Method Ref: APHA (21st edition), 45000: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)
3.92	3.95	+0.03
6.19	6.11	-0.08
8.35	8.22	-0.13
	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	3.87	-0.13
7.0	6.99	-0.01
10.0	10.04	+0.04
	Tolerance Limit (pH unit)	±0.20

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

Ms. Lin Wai Yu, Iris

23-February-2022

Assistant Manager - Inorganic

## REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION

WORK ORDER: HK2146953

SUB-BATCH: 0

DATE OF ISSUE: 24-Nov-2021

CLIENT: MOTT MACDONALD HONG KONG LIMITED

Equipment Type: Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/ [U-53]

Serial No./ Equipment No.:

[HGS No.X42XKBNO]/ [4BHN08KG]

Date of Calibration: 23-November-2021 Date of Next Calibration: 23-February-2022

PARAMETERS:

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

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.04	
4	4.33	+8.3
40	36.3	-9.3
80	82.7	+3.4
400	429	+7.3
800	794	-0.8
	Tolerance Limit (%)	±10.0

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

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.02	
10	9.54	-4.6
20	18.41	-8.0
30	27.66	-7.8
	Tolerance Limit (%)	±10.0

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Ms. Lin Wai Yu, Iris

Assistant Manager - Inorganic

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WORK ORDER: HK2146953

SUB-BATCH: 0

DATE OF ISSUE: 24-Nov-2021

CLIENT: MOTT MACDONALD HONG KONG LIMITED

Equipment Type: Multifunctional Meter

Brand Name/ Model No.:

[HORIBA]/[U-53]

Serial No./ Equipment No.:

[HGS No.X42XKBNO]/ [4BHN08KG]

Date of Calibration: 23-November-2021 Date of Next Calibration: 23-February-2022

PARAMETERS:

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)
11.0	11.69	+0.7
23.0	21.68	-1.3
37.0	35.52	-1.5
	Tolerance Limit (°C)	±2.0

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