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30-Sep-2024

DATE OF ISSUE:

# **REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

CONTACT:	THOMAS CHAN	WORK ORDER:	HK2438445
CLIENT:	MOTT MACDONALD HONG KONG LIMITED		
ADDRESS:	3/F, MANULIFE PLACE, 348 KWUN TONG ROAD	SUB-BATCH:	0
	KWUN TONG, KOWLOON, HONG KONG	LABORATORY:	HONG KONG
		DATE RECEIVED:	23-Sep-2024

## **GENERAL COMMENTS**

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.

This report superseded any previous report(s) with same work order number.

## EQUIPMENT INFORMATION

Equipment information (Brand name, Model No., Serial No. and Equipment No.) is provided by client.				
Equipment Type:	Multifunctional Meter			
Service Nature:	Performance Check			
Scope:	Conductivity, Dissolved Oxygen, pH Value, Turbidity, Salinity and Temperature			
Brand Name/ Model No.: Serial No./ Equipment No.: Date of Calibration:	[HORIBA]/ [U-53] [X42XKBNO/4BHN08KG]/ [N/A] 27-September-2024			

Ms. Lin Wai Yu, Iris

Assistant Manager - Inorganics

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## **REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**



WORK ORDER:	HK2438445		
SUB-BATCH: DATE OF ISSUE: CLIENT:	0 30-Sep-2024 MOTT MACDONALD HONG KC	NG LIMITED	
Equipment Type: Brand Name/ Model No.: Serial No./ Equipment No.:	Multifunctional Meter [HORIBA]/ [U-53] [X42XKBNO/4BHN08KG]/ [N/A]		
Date of Calibration:	27-September-2024	Date of Next Calibration:	27-December-2024

## PARAMETERS:

Conductivity

#### Method Ref: APHA (23rd edition), 2510B

Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)
146.9	161	+9.6
6667	6860	+2.9
12890	13800	+7.1
58670	62700	+6.9
	Tolerance Limit (%)	±10.0

#### **Dissolved Oxygen**

### Method Ref: APHA (23rd edition), 4500O: G

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)		
2.84	2.70	-0.14		
5.44	5.52	+0.08		
7.48	7.35	-0.13		
	Tolerance Limit (mg/L)	±0.20		

#### pH Value

#### Method Ref: APHA (23rd edition), 4500H: B

Expected Reading (pH unit)	Displayed Reading (pH unit)	Tolerance (pH unit)		
4.0	3.93	-0.07		
7.0	6.85	-0.15		
10.0	9.85	-0.15		
	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.

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SUB-BATCH: DATE OF ISSUE: CLIENT:	0 30-Sep-2024 MOTT MACDONALD HONG KC	ONG LIMITED	
Equipment Type: Brand Name/ Model No.: Serial No./ Equipment No.:	Multifunctional Meter [HORIBA]/ [U-53] [X42XKBNO/4BHN08KG]/ [N/A]		
Date of Calibration:	27-September-2024	Date of Next Calibration:	27-December-2024

### **PARAMETERS:**

Turbidity

#### Method Ref: APHA (23rd edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0.00	
4	4.12	+3.0
40	42.5	+6.3
80	86.2	+7.8
400	435	+8.8
800	839	+4.9
	Tolerance Limit (%)	±10.0

Salinity

#### Method Ref: APHA (23rd edition), 2520B

Expected Reading (ppt)	Displayed Reading (ppt)	Tolerance (%)
0	0.01	
10	10.31	+3.1
20	21.83	+9.1
30	32.53	+8.4
	Tolerance Limit (%)	±10.0

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SUB-BATCH: DATE OF ISSUE: CLIENT:	0 30-Sep-2024 MOTT MACDONALD HONG KC	DNG LIMITED	
Equipment Type: Brand Name/ Model No.: Serial No./ Equipment No.: Date of Calibration:	Multifunctional Meter [HORIBA]/ [U-53] [X42XKBNO/4BHN08KG]/ [N/A] 27-September-2024	Date of Next Calibration:	27-December-2024

## **PARAMETERS:**

#### Temperature

#### Method Ref: Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

data No. 5 Second cation Match 2000. Working Thermonic Cr Cambration Procedure.				
Expected Reading (°C)	Displayed Reading (°C)	Tolerance (°C)		
11.0	12.39	+1.4		
19.5	18.74	-0.8		
41.0	40.37	-0.6		
	Tolerance Limit (°C)	±2.0		

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

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